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ABSTRACT

Developed to fill a gap in preservice and inservice training, the materials focus on training special education administrators and program specialists to use computers in program management. Materials include packets to be reproduced for participants as well as outlines, transparency masters, lists of audiovisual materials, and scripts for trainers. Modules touch on the following topics, providing participant and trainer information for each: software, systems, and hardware; microcomputer word processing; administrative planning; databases; microcomputer spreadsheet systems; programmed administrative applications - Individualized Education Program; and evaluation processes. (CL)

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TRAINING OF TRAINERS LEADERSHIP TRAINING FOR ADMINISTRATORS OF SPECIAL EDUCATION IN EMERGING TECHNOLOGY

Developed for the
SPECIAL EDUCATION RESOURCE NETWORK

by

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November 1985

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Presentation at the Annual Convention
of the
Council for Exceptional Children
was based on the document
64th, New Orleans, LA, March 31-April 4, 1986

INTRODUCTION

A Training of Trainers and five training modules have been developed in response to the need for information demonstrated by California special education administrators. During the first phases of the Leadership Training for Administrators of Special Education in Emerging Technology grant (the MicroAdmin project), numerous administrators responded to written and telephone needs assessments regarding the uses of microcomputers for administrative purposes in special education. Among the emerging needs, a lack of educational opportunities to learn about microcomputer use in special education administration and insufficient knowledge among administrators to use microcomputers effectively became apparent.

The following materials have been developed to respond to the need which has arisen due to insufficient opportunities at both the preservice and inservice level for administrators, program specialists, and others involved in the administrative duties of special education.

Five training modules have been developed to assist the special education administrator who is a novice or near novice regarding computers become more computer literate. Trainings for novice computer users are being conducted as part of the grant.

While it is our intention that the trainings and materials be disseminated, we ask that any use or reproduction of the materials acknowledge the California State Department of Education's Special Education Division and the Personnel Development Unit and the Federal VI-D Personnel Preparation grant #029 HH 300 16 as the source, and not be distributed under any name of any other author or source.

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Training Resources and Technologies

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*Don Hack, Yuba County Schools

- *Don Hack, Yuba County Schools
- *Nancy Reinke, Napa County Schools
- *Sanford Glovinsky, Rialto School District
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- *Diane Donaldson, Long Beach Unified School District
- *Joyce Newton, Buffum School

and

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SERN Resource Service Center.

HOW TO USE THIS TRAINING MANUAL

There are two kinds of materials in this training manual.

The materials on white pages are participant packets and can be reproduced to use as handouts at trainings.

The materials on colored pages are to assist the trainer. There four kinds of materials for the trainer:

- a. training outlines
- b. transparency masters
- c. a/v materials lists
- d. scripts

The training outlines are on yellow paper. They provide a quick summary of the trainer's activities, the expected response of the participants during the trainer's activities, the time expected for each segment of the module, and the materials the trainer will need for each segment of the module.

The transparency masters have been reproduced on white paper to enable the trainer to make transparencies for overhead projectors from them.

Audio/visual materials have been expanded to include needed software and various other materials to be used during the training module. These will be listed on yellow paper.

The trainer's script, either a narrative or list of points to cover, is printed on blue paper. This details the content of the session, as well as provides easy to understand terms and phrases with which the trainer can present the materials to the novice audience. Computer literate trainers are cautioned against using jargon which is commonplace to them, but is out of place to a school administrator.

All the contents of the training manuals, with the exception of any articles, may be reproduced to train additional trainers with appropriate reference to the source. Permission to reproduce articles should be obtained from the appropriate publisher.

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Participant Packet
Training Outline
A/V Materials List
Script

M1
M6
M10
M12

Appendix

N1

INTRODUCTION TO TRAINING OF TRAINERS
PARTICIPANT PACKET

INTRODUCTION TO TRAINING OF TRAINERS

AGENDA:

Thursday Evening

- * Introduction and Agenda
- * An Awareness of Software Systems, Purchasing and Hardware
- * Informal Evaluation and Feedback

Friday

- * Microcomputer Word Processing
- * Administrative Planning
- * Data Bases
- * Summary and Informal Evaluation

Saturday

- * Spread Sheets
- * Preprogrammed Administrative Applications: IEP
- * Next Steps
- * Development of Awareness Training Module
- * Module Sharing
- * Evaluation and Follow-up Opportunities

INTRODUCTION TO TRAINING OF TRAINERS

OVERVIEW OF WORKSHOP SESSION

Purpose(s): To introduce the training of trainers, lay the foundation and present goals and training materials.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
25 min	Registration Introduce Agendas Parameters Trainers	Part 1 Listen	PIF Agendas Charts Pens Training packets
<u>TRANSITION:</u>	This 21/2 day workshop is one of the outcomes of the MicroAdmin Project.		
10 min	MicroAdmin Project		
<u>TRANSITION:</u>	We're here to give you information, skills and tools. We hope that what you need and what we plan to give are well matched.		
15 min	Participant's expectations		Share expectations

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED

TRANSITION: Watch the presenter very closely as the remainder of the evening is an awareness session. You may build your awareness module very similarly to the one he has planned, or you may wish to make it quite different.

INTRODUCTION TO TRAINING OF TRAINERS
AV SHEET

INTRODUCTION TO TRAINING
OF TRAINERS
SCRIPT

INTRODUCTION TO TRAINING OF TRAINERS

GOAL: To lay the foundation of the training and familiarize the participants with the trainers and MicroAdmin Project.

GOAL: To establish goals for the 2-1/2 days of training and clarify expectations of the participants.

GOAL: To establish the parameters within which the workshop will be carried out.

GOAL: To present participants with the training materials and modules.

Points to Cover/Script:

Participants should have completed a participant information form upon arrival. These should be collected.

1. Greet the participants, expressing thanks at having them take time from their busy schedule to attend a training that covers both an evening and Saturday. Tell how this workshop may help employ their time more effectively and efficiently through use of appropriate technology. Review agenda. Note general times for the training segments indicated.

2. Establish information regarding location of restrooms, smoking, etc. and decide policy governing cross conversations, questions, and attendance.

3. Introduce trainers. Include information regarding:

a. special education experience

b. experience with microcomputers

c. experience training adults

d. other relevant information that will bond audience

TRANSITION: This 2-1/2 day workshop is one of the outcomes of the MicroAdmin Project.

4. Introduce the MicroAdmin Project. Include the following information:

a. three year federal VI-D grant

b. this is the final year

c. purpose is to provide resources to administrators of special education regarding microcomputer technology and its use in their administrative roles

d. objectives include the development of training modules, the delivery of training using the modules, a Critical Consumers And Users Guide, Regional User Support Groups, and identification of software needs and the facilitation of software providers meeting those needs

e. studies conducted through the grant identified few resources available to the special education administrator in the community, whether pre-service or inservice

f. many administrators don't know where to go to get the very first bits of information, to identify whether they need to be concerned about getting a microcomputer or not

TRANSITION: We're here to give you information, skills and tools. We hope that what you need and what we plan to give are well matched.

*5. Ask group to tell their expectations of the training of trainers.
[chart]*

6. Identify trainers' expectations and goals for the training:

This is a training of trainers. We expect that each participant is computer literate, and familiar with basic best-practices in teaching adult learners. We further expect that participants will take the training modules we will be presenting and return to their sites to train their staff with the modules. We have encouraged participation in teams.

The purposes of the training of trainers are:

- a. to provide participants with tools and/or information that will enable them to conduct a needs assessment of their site/role in relation to implementing microcomputer technology;*
- b. to provide participants with information regarding some basic kinds of microcomputer uses and how they could be implemented at their home sites;*
- c. to provide participants with information regarding software evaluation for word processing, data bases, spreadsheets, and IEP;*
- d. to provide participants with examples, and experiences using microcomputers and the software types we are discussing;*
- e. to provide participants with a plan for providing the trainings to their own staffs; and*
- f. to provide participants an opportunity to discuss how they will facilitate the implementation of these skills and information.*

Everyone is expected to participate through the final activity. The final activity is to develop an awareness training for your staffs, based upon the information you receive from us and your own insights into your staff.

We are providing you with trainers' scripts and tools. We do not provide the software or hardware. You may obtain the same

software we are using or you may obtain different software and adapt the modules accordingly. You may already have some of this software on site.

TRANSITION: Watch the presenter very closely as the remainder of the evening will be an awareness session. You may build your awareness module very similar to the one he has planned, or you may wish to make it quite different.

OVERVIEW:
SOFTWARE, SYSTEMS, HARDWARE
PARTICIPANT PACKET

GROUP EXERCISE I PLANNING

1. Group members introduce themselves.
2. Select one person to take notes for the group.
3. Choose a management task or problem as a group that you would like to computerize. It should be large enough that it would be necessary to report your decision to the superintendent.
4. Use the planning model provided and a budget of undetermined size. Allocate 100% of the budget to the areas shown in the model.

NEEDS, PRIORITIES, BENEFITS	:	%
SOFTWARE EVALUATION	:	%
HARDWARE	:	%
INSTALLATION OF EQUIPMENT	:	%
TRAINING	:	%
SYSTEM OPERATIONS	:	%
SERVICE/SUPPLIES	:	%
SECURITY	:	%

5. Identify, based on the above values, which areas received the highest priority.

6. Identify and list five questions which need to be answered in order to accomplish this top priority.

- 1.
- 2.
- 3.
- 4.
- 5.

If time permits, identify five questions which need to be answered in order to accomplish the second priority.

- 1.
- 2.
- 3.
- 4.
- 5.

DESIGNING A DECISION SUPPORT SYSTEM

Underlying Premise: The degree of structure of the problem solving situation effects the kind of information that managers can use to solve the problem or make the best possible decision.

Support Systems for Managerial Decision-Making: There are three major classifications of support tools initially designed to assist managers in business. The Management Information Systems, Decision Support Systems, and Operations Research/Management Science (OR/MS). Each of these approaches require computer support. It is in the design and application of this support to meet management needs that each tool is distinctive.

Management Information System (MIS):

- A. The main payoff has been on structured tasks where standard procedures, decision rules, and information flows can reliably be predetermined.
- B. The main payoff has been on improving efficiency by reducing costs, turnaround time, and so on, and by replacing clerical personnel.
- C. The relevance for managers' decision making has been mainly indirect, for example, by providing reports and access to data.

OPERATIONS RESEARCH/MANAGEMENT SCIENCE:

- A. The impact has mostly been on structured problems like fiscal forecasting (rather than tasks) where objective, data, and constraints can be pre-specified. It generates the best possible solution or choice.
- B. The payoff has been in generating better solutions for given types of problems.
- C. The relevance for managers has been the provision of

detailed recommendations and new methodologies for handling complex problems.

DECISION SUPPORT SYSTEMS (DSS):

- A. The impact is on decisions where there is sufficient structure for computer and analytic aids to be of value but where manager's judgement is essential. The idea is to develop an information system around your need(s) for information.
- B. The payoff is in extending the range and capability of manager's decision processes to help improve their effectiveness.
- C. The relevance for managers is the creation of a supportive tool, under their own control, which does not attempt to automate the decision process, predefine objectives, or impose solutions. In other words a DSS supports management decisions, it does not make them. It does get the managers involved.

Decision Support Systems: Decision support is more about decision making than computer technology. It is a strategy that has more to do with how managers define problems and establish decision rules in solving them. It is a strategy more concerned with effectiveness in managerial decision making than the efficient processing of information. Selecting the right criterion for problem definition and the best process of resolution are of more interest. It is a strategy in contrast to MIS or OR/MS that emphasizes the match between the managers perception of what's important in the organizational context and his/her mode of operation.

In a DSS the manager plays an active part in defining, designing, and using the system rather than a passive role. Because the very premise of DSS is improving managerial effectiveness, the manager must initiate, design, control, and direct the implementation process. Without this leadership coming from the leadership user, others more technically oriented will continue to design and develop applications that only approximate managerial preferences, predispositions, and judgement.

Major Information Subsystems for DDS: The managerial function can be summarized into three specific functions: Planning, Decisions & Evaluating information feedback. The decision function can be made most effective when accurate, accessible information subsystems are established to provide factual planning data and evaluation feedback of decision outcomes.

Suggested information subsystems would include Student Data; Programs and Services; Personnel; Fiscal; Facility Development/Utilization; Instructional Materials/Equipment; Agency Resumes/Agreements; Evaluation/Research; and, Personal Time Allocations/Committees.

Once a list of specific information subsystems has been established, then specific planning and evaluation data elements that would assist in decision making need to be identified for each subsystem. It will quickly be discovered that many processes of data aggregation and analysis will be common to several if not all subsystems. Examples would be file development and modification, printing and report generation, searching of files, aggregation of data, and preparation of designated statistics. The assistance of a person who is experienced in database system designs and programming is often very cost effective in establishing the details inherent in such systems.

As was initially stated, however, a decision support system is based on the premise that the most effective information support system is one where the manager who makes the decisions works with and guides the technical personnel in the design and implementation of the Design Support System.

Acknowledgment of much of the content of this concept paper is given to the Indiana Decision Support System Network at Indiana University. Particular acknowledgment is made to Leonard Burello and Michael Tracy for the Decision Support System design and their compilations of the research findings of several authors.

DATABASE SAMPLE

NAME MONTOKA DIANA ID MONTD 051666 NEXT REVIEW 04/86
 ADDR 4436 ENGLE ROAD BIRTHDATE 05/16/66 SEX M GRADE UN
 CITY MARYSVILLE, CA ZIPCODE 95901 HANDICAP 11 LEARN.DISABILITY
 PARENT JIM & JACKIE TROTTER RELATIONSHIP 2 FOSTER LAST ASSESSED 04/01/79
 LANGUAGE 2 SPANISH ENGLISH PROF 2 NES ETHNIC 5 AMER.IND.
 SPEC.ED. EXIT DATE / / CERTIFIED DATE 04/01/78

SPECIAL EDUCATION
 ATTENDANCE DISTRICT 457 INVALID EXTEND.SCHOOL PE Y TRANS 2
 ATTENDANCE SCHOOL 783 ADAMS ELEM. YEAR N DIFF.GRAD.STDS \
 RESIDENCE DISTRICT 736 INVALID TEST MODIF. Y
 RESIDENCE SCHOOL 202 MARYSVILLE HIGH ADMIN PLACEMENT / /

PROGRAM	TEACHER	PROGRAM	TEACHER
701 LH-SP.CLASS	JONES M	350 HOME &HOSPIT	O'LEARY

TELEPHONE 483-6417 ERROR STATUS
 THIS STUDENT REQUIRES WHEELCHAIR ACCESSIBLE BUS

NEW CERT.PROG NEW CERT.DATE / /
 PROJ.ENROLL DATE / /
 PREVIOUS PROGRAMS IF NOW INACTIVE

A database stores multiple pieces of information about an individual subject.

WORD PROCESSING SAMPLE PROGRAM

November 4, 1985

Specifics will be entered here using information in a set of data base fields automatically from "Mail Merge".

```
.op
.df MSLCSCHLST3.TXT
.rv CODE,NAME,ADDRESS,CITY,ZIP,LPRINCE,FPRINCE,MINITIAL,TITLE,TYPE,PHONE,DISTRICT,C
&FPRINCE& &MINITIAL& &LPRINCE&
&TITLE&
&NAME&
&ADDRESS&
&CITY&, &STATE& &ZIP&
```

Dear &TITLE&:

You are invited to a brunch and learning skills demonstration on Wednesday, November 13, 1985 from 11:00 a.m. to 12:00 p.m.. We feel that our diagnostic and tutorial services are the finest in Northern California and look forward to sharing them with you. Please telephone our office for a reservation and advise us of the number of your staff who will accompany you.

Since 1968 the Melvin - Smith Learning Center has provided its unique educational services to clients throughout Northern California. Operating under the direction of Joan M. Smith, Ed.D., licensed educational psychologist and speech pathologist, our clinical staff provides diagnostic evaluations and educational therapy sessions for children and adults with learning disabilities. It is through a detailed analysis of these evaluations that we are able to diagnose the causes of learning problems and prescribe a series of educational therapy sessions to remediate the identified needs.

Our diagnostic evaluations are administered at our Sacramento North area location at 4436 Engle Road, three blocks West of American River Hospital. Our tutorial sessions have traditionally been held at the same location. We are now pleased to also announce the opening of our second tutorial center at 4448 1/2 Freeport Boulevard, one block South of Sutterville Road, near William Land Park in South Sacramento. We are looking forward to seeing you on November 13th.

Sincerely,

Joan M. Smith, Ed.D.
Educational Director

Gregory L. Smith
Executive Director

.pa

Draft

WORD PROCESSING SAMPLE

The result is this
tailored letter.

November 4, 1985

Jack Schott
Principal
Holst Elementary
4501 Bannister Ave.
Fair Oaks, CA 95628

Dear Principal:

You are invited to a brunch and learning skills demonstration on Wednesday, November 13, 1985 from 11:00 a.m. to 12:00 p.m.. We feel that our diagnostic and tutorial services are the finest in Northern California and look forward to sharing them with you. Please telephone our office for a reservation and advise us of the number of your staff who will accompany you.

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Sincerely,

Joan M. Smith, Ed.D.
Educational Director

Gregory L. Smith
Executive Director

Draft

INSTRUCTIONAL PERSONNEL UNITS ALLOCATION															
P47 A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
DISTRICT WITHIN CITY	CBED	STATE SCC 2.8% MAXIMUM	DISTRICT CO. CLASS CLASSES	AVERAGE CO. CLASS SIZE	COUNTY OPERATED PUPILS	OTHER OPERATED PUPILS	SELPA OPERATED CLASSES	TOTAL CLASSES	CLASS X DISTRICT RESOURCE MAX 2.8% PROGRAM	RSP MAX 4% OPERATED	DISTRICT DIS MAX 4.2% OPERATED	DIS MAX 4.2% OPERATED	TOTAL SPEC ED MAX 10%		
A	7878	22.05	15	10	106	10.6	23	2.3	27.9	3.54	12	3.66	8	2.44	9.63
B	1550	4.34	6	10	10	1	1	.1	7.1	4.58	1	1.55	2	3.10	9.23
C	496	1.38	0	10	1	.1		0	.1	0.20	2	9.68	.5	2.42	12.30
D	250	.07	0	10	1	.1		0	.1	0.40	1	9.60	.25	2.40	12.40
E	994	.26	0	10	0	0		0	0	0.00	10	24.14	1	2.41	26.56
TOTALS	11168		21		118	12	24	2.4	35.2		26		11.75		

-38 LESS LCI

10 PLUS OUR KIDS IN OTHER SELPA

-24 LESS OTHER SELPA KIDS IN OUR PROGRAMS

11116 ADJUSTED TOTAL

TOTAL DISTRICT
UNITS SERVED
X STATE FORMULA
DIVIDED BY
ADJUSTED TOTAL

CLASS RSP DIS TOTAL

35.20 26 11.75
10 24 24

11116 11116 11116

TOTAL X IPS
UNITS SERVED

3.17 5.61 2.54 11.32

LESS 10% STATE MAXIMUM -10.00

OVER/UNDER BUDGET 1.32

Spread sheets are used when you are trying to keep track of a few independent elements involving math functions.

HOMEWORK ASSIGNMENT

OVERVIEW / AWARENESS MODULE:

- 1) Select three recurring, time-consuming tasks involving information that you might want to consider "computerizing".
- 2) For each, list what you would like the computer to be able to do to make these tasks easier.
- 3) Identify which general type of program that you think would best meet the processing needs for each application.
(word processing, spreadsheet, database)

OVERVIEW:
SOFTWARE, SYSTEMS, HARDWARE

OVERVIEW: SOFTWARE, SYSTEMS, HARDWARE

PURPOSE(S): The purpose of this workshop session is to introduce the Decision Support System conceptual framework of the workshop series as well as to provide an overview of the factors to be considered when purchasing microcomputer equipment or programs for administrative purposes.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
5 min.	Script B-22 Introduce purpose of this workshop session. If not previously done ask participants to identify themselves and their job roles.	Listen & identify roles	
5 min	Ask audience to list the tasks involved in performing the duties of a Special Education Director or Program Administrator.	List tasks	Flipchart

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	Write tasks on flipchart.		
5 min.	Have participants identify those duties that require decision making or written communication.	Identify and discuss tasks	Flipchart
5 min.	Introduce the concept of a Decision Support System. Describe DSS concept and contrast with MIS and simulation.	Listen and discuss	Handout DSS definition
5 min.	Ask participants to describe what type of information systems and written communication they use to support their decision-making process.	Describe their current DSS and word processing systems	List on flipchart
5 min.	Define and give examples of use for database, spreadsheet, and word processing systems.	Listen	Handout examples
35			

Section 3
Dist. 1
W. 8

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
5 min.	Ask participants to suggest which of the above information processing systems could be used to support the administrative tasks. Script B-23	Discuss and identify systems	Previous flipchart from A2
5 min.	Introduce the planning model approach to implementing a DSS. (page F-12) Discuss each feature of the planning model and the need for each segment.	Listen and discuss	Handout planning model (p. F12)
5 min.	Discuss the features of project management documentation and its use.	Listen and discuss	Handout project mgt. chart

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
<u>TRANSITION:</u> We have looked at decision support systems and a planning model. The next series of activities is designed to teach you how to apply the planning model to a specific situation.			
5 min.	Divide participants into 3 groups and ask each group to determine an administrative task to computerize	Divide into groups and decide on a task	Flipchart
5 min.	Using the planning Model having each group allocate % of a budget into each task required for computerization. (pg. B-2)	Discuss budget allocations Write budget for each group	
5 min.	Groups share results-similarities and dissimilarities.	Discuss rationale for differences	
5 min.	Each group is asked to list 5-10 tasks within the project.	List and discuss task options	Flipchart

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
15 min.	Each member of a group rates each task on a scale of 1-5 (one lowest) in each of three areas: a. Importance of the task to the organization. b. Sufficiency of resources (\$,time, personnel) to do the task within adopted budget. c. Likelihood of successful task accomplishment based on resources allocated.	Detailed task rating Each group records each member response	
10 min	Scores are totaled individually and for the group. The top scoring task is identified and discussed until consensus is reached on most feasible task.	Total scores discussed Group total scores on a chart	

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
TRANSITION: Tonight we covered the general need and process of looking at our decision support systems. Tomorrow a more specific application will be presented..			
30 min	Script B-24 Telecommunications is also widely used. It has alternative data formats and programming system considerations. - mainframe - networks - future		

TRANSITION: These are just some highlights of the many new technological advances. Before going any further we'd like to check in on how we're advancing with you.

OVERVIEW
AV SHEET

AV MATERIALS LIST

. Chart and Pens

OVERVIEW: SOFTWARE, SYSTEMS, HARDWARE
SCRIPT

OVERVIEW: SOFTWARE, SYSTEMS, HARDWARE

GOAL: To introduce the concept of Decision Support Systems and the type of available computer programs to support decisions.

GOAL: To have the audience identify the major administrative duties of a Director of Special Education.

Points to Cover/Script:

1. *Ask audience to list the tasks involved in performing the duties of a Director of Special Education or Program Administrator (10 min).*

2. *Write major points on flipchart.*

3. *Identify those duties that require decision making or written communication.*

GOAL: The goal of this section is to introduce the concept of a Decision Support System.

Points to Cover/Script:

1. *Describe Decision Support System concept and handout written description (5 min).*

2. *Ask audience to identify what types of information systems they currently use to support their decision making process and to create written communication.*

GOAL: The goal of this section is to generally describe the purpose and function of a database, spreadsheet and word processing system.

Dish IV
3.5
Section B

Points to Cover/Script:

1. Describe each type of system and (10 min).
2. Ask audience to suggest which of these types of information systems could be used to support the administrative tasks identified in Goal.

GOAL: To introduce the planning model approach for successful implementation of computer based decision support systems.

GOAL : To describe the planning model in detail.

Points to Cover/Script:

1. Using planning model handout describe the features of and need for each segment of the planning model.
2. Discuss advantages of using project management techniques to manage complex tasks.
3. Hand out and discuss sample project management chart (10 min).

TRANSITION: We have looked at decision support systems and a planning model. The next series of activities are designed to teach you how to apply the planning model to a specific situation.

GOAL: This section is designed to have the audience apply the theoretical planning model to a specific situation.

Points to Cover/Script:

1. Participants are divided into three groups and each group is asked to determine a major task to computerize.
2. Using the planning model the group must allocate percentages of an imaginary budget into the various tasks which will be required to plan for implementation . (10 min).

3. Groups share results, similarities, and differences are discussed (5 min).

4. Each group will generate a list of five to ten tasks within the general project that they would like to computerize.

5. Each member rates each of the above tasks on a scale of one to five (one is lowest) in each of the three following areas: (15 min)

a. importance of the task to the organization

b. sufficiency of resources (\$, time, personnel) to do the task within the budget

c. basic feeling if the organization can be successful in computerizing this task based on budget allocations

6. Scores are totalled individually and for the group. Top scoring task is identified and discussed until consensus is reached on most feasible task.

TRANSITION: Tonight we covered the general need and process of looking at our decision support systems. Tomorrow a more specific application will be presented.

GOAL: To develop an understanding of significant considerations in telecommunications and exchanging data with other computers.

Points to Cover/Script:

1. Necessary telecommunication components

- . Internal or external modem
- . Access to a phone line
- . Communication program

2. Communication control

- . By mainframe or microcomputer

3. *Alternative data formats and programming system considerations (30 min).*

4. *Mainframe data exchange considerations*

- . *Who's controlling it*
- . *Make sure the programs you are exchanging can be run on their machine and vice versa (same language)*

5. *Microcomputer local area networks - present or future*

TRANSITION: These are just some highlights of the many new technological advances. Before going any further we'd like to check-in on the workshop content to this point.

EVALUATION AND FEEDBACK
PARTICIPANT PACKET

SERN ID M/D/Y TOPIC SERVICE SPECIAL EDUCATION RESOURCE NETWORK
PRESENTATION RATINGREQUESTER/HOST

The intent of this form is to give you an opportunity to comment on various aspects of this inservice.

Feel free to make additional comments on the back of this page.

WORKSHOP TITLE _____

	Low	Below Average	Average	Above Average	High				
<i>Inservice Evaluation:</i>									
1) To what extent were objectives clear?	1	2	3	4	5				
2) To what extent were objectives met?	1	2	3	4	5				
3) To what extent were materials provided of value in meeting objectives?	1	2	3	4	5				
4) To what extent were the activities of value in meeting objectives?	1	2	3	4	5				
<i>Presenter Evaluation:</i>									
1) To what extent did the presenter(s) appear to be knowledgeable about this subject?	1	2	3	4	5				
2) To what extent was the presenter(s) able to communicate the subject content?	1	2	3	4	5				
3) To what extent was the presenter(s) willing to adjust to meet the specific demands of the participants?	1	2	3	4	5				
<i>Self Evaluation:</i>									
1) To what extent has this presentation increased your knowledge of the topic?	1	2	3	4	5				
2) To what extent do you feel this knowledge will be useful?	1	2	3	4	5				
3) To what extent do you feel capable of using this knowledge?	1	2	3	4	5				
<i>General Evaluation:</i>	Low		Average		High				
1) Everything considered, I would rate the worth of this inservice to me as:	1	2	3	4	5	6	7	8	9
2) Everything considered, I would rate the presenter(s):	Low		Average		High				
	1	2	3	4	5	6	7	8	9
What were the major strengths of this inservice?	_____								

What were the major weaknesses?	_____								

As a follow-up to this inservice, I would like:	_____								

I would also like inservice in the following area(s) of:	_____								

SERN ID M/D/Y

TOPIC SERVICE

**SPECIAL EDUCATION RESOURCE NETWORK
PRESENTATION RATING**

REQUESTER/HOST

The intent of this form is to give you an opportunity to comment on various aspects of this inservice.
Feel free to make additional comments on the back of this page.

WORKSHOP TITLE _____

<i>Inservice Evaluation:</i>	Low	Below Average	Average	Above Average	High
1) To what extent were objectives clear?	1	2	3	4	5
2) To what extent were objectives met?	1	2	3	4	5
3) To what extent were materials provided of value in meeting objectives?	1	2	3	4	5
4) To what extent were the activities of value in meeting objectives?	1	2	3	4	5

<i>Presenter Evaluation:</i>	Low	Below Average	Average	Above Average	High
1) To what extent did the presenter(s) appear to be knowledgeable about this subject?	1	2	3	4	5
2) To what extent was the presenter(s) able to communicate the subject content?	1	2	3	4	5
3) To what extent was the presenter(s) willing to adjust to meet the specific demands of the participants?	1	2	3	4	5

<i>Self Evaluation:</i>	Low	Below Average	Average	Above Average	High
1) To what extent has this presentation increased your knowledge of the topic?	1	2	3	4	5
2) To what extent do you feel this knowledge will be useful?	1	2	3	4	5
3) To what extent do you feel capable of using this knowledge?	1	2	3	4	5

<i>General Evaluation:</i>	Low			Average				High	
1) Everything considered, I would rate the worth of this inservice to me as:	1	2	3	4	5	6	7	8	9
2) Everything considered, I would rate the presenter(s):	Low			Average				High	
	1	2	3	4	5	6	7	8	9

What were the major strengths of this inservice? _____

What were the major weaknesses? _____

As a follow-up to this inservice, I would like: _____

I would also like inservice in the following area(s) of: _____

EVALUATION AND FEEDBACK
SCRIPT

EVALUATION AND FEEDBACK

GOAL: To assess the effects of the awareness level training on the participants, and identify any areas where modification is necessary.

Points to Cover/Script:

- 1. Identify the lateness of the hour, and the need to provide closure.*
- 2. Ask the group to complete the participant rating form (103).*
- 3. Ask the group to respond to the following questions, [chart]:*
 - a. What were some positives and negatives regarding the evenings information for you?*
 - b. What were some advantages of the process ?*
 - c. Do you have any concerns you'd like to express?*

TRANSITION: We'll see you at 8 am sharp tomorrow.

DAY ONE OPENING
SCRIPT

DAY 1, OPENING

GOAL: To bridge the previous evening's training to today's content.

Points to Cover/Script:

1. During our last session we set the stage for more in-depth information about needs sensing, using microcomputers in special education for administrative purposes, and software/hardware evaluation. We've established some common purposes and should be ready to move into our first module, word processing. Are there any questions before we move on?

TRANSITION: First we will be sharing some general information about word processing with you, as well as demonstrating one or two specific softwares.

MICROCOMPUTER WORD PROCESSING
PARTICIPANT PACKET

1.

INTRODUCTION TO WORD PROCESSING WORKSHOP AGENDA

<u>ACTIVITY</u>	<u>TIME</u>
Introduction	10 min
Word Processing Tasks You Do	5 min
Magic Window Hands On Tutorial	45 min
Tutorial Discussion	5 min
Needs Assessment and Software Selection	55 min
Closure and Evaluation	5 min

MAGIC WINDOW TUTORIAL

This tutorial will introduce you to the operation of Magic Window. Please follow all directions. If you have any questions please stop and ask the instructor. The following conventions will be used throughout the tutorial.

- - Indicates each step in the tutorial where an action is required by the user.

"/" - Anything in quotes refers to a key on the computer to be pressed by the user.

MAGIC WINDOW - Anything underlined indicates something you will see on the computer screen.

'Noow is' - Anything between apostrophes indicates something you will type into the computer. When typing the indicated word(s) do not type the apostrophes.

Type - means to press the keys for the letters or characters which follow.

1. BOOTING MAGIC WINDOW

- Put "CAP LOCK" key in up position.
- Place The Magic Window diskette into the disk drive with label facing up.
- Close the disk drive door.
- Turn on the computer.
- Wait until you see

MAGIC WINDOW II

PLEASE SELECT VERSION

- Type '1'
- When you see

MAGIC WINDOW II

- Press "Return"

2. PROGRAM CONFIGURATION

You will see the Magic Window System Menu. Before we begin to use the word processing program, we need to format the system to conform to our computer monitor. That is, we are only able to view forty characters at a time on the screen. To begin our work, we will tell the word processing program that we have a left margin of 0 and a text width of 40.

- Type '4' and press "RETURN"
- Type '2' and press "RETURN"
- Type 'D' and press "RETURN"
- Type '40' and press "RETURN"
- Type 'E' and press "RETURN"
- Type '0' and press "RETURN"
- Type 'F' and press "RETURN"
- Type '40' and press "RETURN"
- Type '1' and press "RETURN"

You should be back at the MAGIC WINDOW II SYSTEM MENU.

- The cursor (light bar) should be over the #1. Press "RETURN" to enter the editor (this is where the actual typing will take place).

3. MOVING THE CURSOR

We are now in the editor. Before we begin to type, let's look at the screen. At the top left you will see (NO NAME). This indicates we have not given a file name to the document we are working on. More on that later. To the right of this is P 1 indicating this is page 1. Next we see L 7 indicating we are on line seven of the page. When we reset the left margin and the text width, you may have noticed the top margin was set to 7. Lastly, we see C 1 indicating we are in column 1. Any idea why? Right! We set the left margin to 0. Therefore, we begin our typing at the first column. We are now ready to enter text and learn how to edit.

[Note: please locate the "CONTROL" key on the computer. When you are asked to type 'CONTROL Z' or 'CONTROL Q' etc., this means to

- 1) hold down the "CONTROL" key and then
- 2) press the other indicated key.

Example:

'CONTROL Z' - press and hold "CONTROL" then tap "Z" key. This is sometimes referred to as a control key sequence].

- Press "(RIGHT ARROW KEY)"

What happens?

- Press "(LEFT ARROW KEY)"

What happens?

- Press "RETURN"

What happens?

Warning!!!!!!

The version of Magic Window we are using is designed for the Apple II microcomputer. If you are using an Apple IIe, certain keys on your computer will not work or produce strange results.

Keys which should not be used are "TAB", "DELETE", "DOWN ARROW", and "UP ARROW".

- type 'CONTROL Z'

What happens?

- type 'CONTROL Q'

What happens?

Practice moving the cursor around the work area (screen)

- type 'CONTROL 2'

This returns us to the System Menu

- Press "RETURN"

4. ENTERING TEXT AND EDITING

We are now back in the editor at the top of our page.

- type in the following line exactly as you see it:

[Note: use the "SHIFT" key to make capital letters (just like a typewriter).]

'Noow are tha time for al good mane to came to thee aid
off there coounty?'

Did you notice what happened when you got to the word came? There wasn't enough room on the line. One powerful feature of any word processing program is its ability to "wrap around".

Now that we have some text entered, let's edit it so it appears in a more acceptable form.

- move cursor to first o in Noow, type 'CONTROL D'
- move cursor to a in are, type 'is' over the ar.
- move cursor to e and type 'CONTROL D'
(word should now read is.)
- move cursor to a in tha, type 'e'

- move to space after tim, type 'CONTROL F', type 'e'
- move to space after al, type 'CONTROL F', type 'l'
- move to a in mane, type 'e'
- move to e in mane, type 'CONTROL D'
- move to a in came, type 'o'
- move to e in thee, type 'CONTROL D'
- move to f in off, type 'CONTROL D'
- move to r in there, type 'i'
- move to e in there, type 'r'
- move to second o in coounty, type 'CONTROL D'
- move to y in coounty, type 'CONTROL F' type r
- move to ?, type '.'
- move to space after men, type 'CONTROL T', type 'and women', type 'CONTROL G', type 'CONTROL G' again.

The sentence should now read:

Now is the time for all good men and women to come to the aid of their country.

Congratulations! You now know how to edit text using Magic Window.

5. PRACTICE: LOADING A FILE AND EDITING

Let's practice this new skill by editing a file that you will find on the data disk provided.

- Remove Magic Window disk from disk drive and return to protective envelope.

- Insert data disk, label up, into drive and close door.
- Type 'CONTROL 2'
- Type '2', press "RETURN"

This takes you to the FILER SUBSYSTEM.

- Type '4', press "RETURN"

You will see a warning which asks you if you want to continue since you have not saved your file. When we work with a word processing program we typically save our work in a file on the data disk. We don't need to save the work we have done so far, therefore.

- type 'Y', press "RETURN"

You should now see a listing or catalog of all the files on the data disk. We want the file named INTRO which is #6.

- type '6', press "RETURN"

Notice the red light lit up, on the disk drive. This indicated a file has now been loaded into the memory of the computer and we can work with it in the editor.

- press "RETURN" to return to SYSTEM MENU
- press "RETURN" to go to the editor

Practice what you have learned by correcting the paragraph on your screen. Use the Editing Command Summary for help.

6. PRACTICE: LOADING A FILE, EDITING, SAVING AND PRINTING

After correcting the paragraph do the following to load a new file:

- type 'CONTROL 2', type '2', press "RETURN", type '4', press "RETURN", type 'Y', press "RETURN", type '21', press "RETURN"

This will load a new file called PRACTICE

- press "RETURN", press "RETURN" to return to the editor (work area).

Follow the directions on the screen, (move the cursor down the text).

This activity completes the Magic Window Tutorial.

EDITING COMMAND SUMMARY

<u>Command</u>	<u>Action</u>
"CONTROL D"	DELETE A CHARACTER AT CURSOR
"CONTROL F"	INSERT A SPACE AT CURSOR
"CONTROL Q"	MOVE CURSOR UP ONE LINE
"CONTROL Z"	MOVE CURSOR DOWN ONE LINE
"CONTROL X"	MOVE CURSOR DOWN 12 LINES
"CONTROL A"	MOVE CURSOR TO BEGINNING OF LINE - TAB BACK
"CONTROL S"	MOVE CURSOR TO NEXT TAB STOP
"CONTROL E"	MOVE CURSOR TO TOP OF WORK
"CONTROL C"	MOVE CURSOR TO END OF WORK
"CONTROL U"	MOVE ONE SPACE FORWARD - SAME AS "RIGHT ARROW"
"CONTROL H"	MOVE BACK ONE SPACE - SAME AS "LEFT ARROW"
"CONTROL K"	ERASE (KILL) LINE CURSOR IS ON
"CONTROL R"	RECOVER LAST LINE KILLED
"CONTROL V"	INSERT A BLANK LINE AT CURSOR
"CONTROL L"	ERASE FROM CURSOR TO END OF LINE
"CONTROL T"	SPLIT LINE AT CURSOR TO MAKE MORE ROOM
"CONTROL G"	"GLUE" OR PUT THE LINES BACK TOGETHER AFTER A "CONTROL T"

5.

WORD PROCESSING NEEDS ASSESSMENT FORMS

MICROCOMPUTER WORD PROCESSING

A Program which allows the user to type text into the memory of the microcomputer. This text may then be stored, edited and printed to produce a variety of finished documents.

TERMS

Bold Print - Providing a way to emphasize designated text by overprinting or double striking

Chaining - Ability to combine separately stored documents into one

Cursor - A marker which shows you where you are on the screen

Delete - Remove text

Deletion - Ability to remove letters, words, sentences and paragraphs

Dictionary - Ability to indicate probable spelling or incorrectly spelled words

Fonts - To set the margins and other print characteristics

Global Editing - Ability to find and replace all or part of an occurrence of a word with another

Glossary - A listing of frequently used words which may be called up by striking one key

Headers - Ability to format text at the top of a document such as titles

Horizontal Centering - Document is centered between left and right margins

Hyphenation - Ability to control what and where a word will be broken at the end of a line

Spell Checking - Ability to indicate words which may be spelled incorrectly

Store - Save document on a diskette

Tabs - Placing preset stops in a document, useful in producing documents with columns

Underlining - Providing a way to place a line underneath designated text

Vertical Centering - Document is centered between top and bottom margins

WORD PROCESSING PLANNING DOCUMENT

#2

Required - 3
Desired - 2
Not Needed - 1

W.P. CHARACTERISTICS

W.P. APPLICATION

LEFT JUSTIFICATION
RIGHT JUSTIFICATION
HORIZONTAL CENTERING
VERTICAL CENTERING
PROPORTIONAL CENTERING
TABS
INDENTATION
UNDERLINING
BOLD PRINT
FONTS
GLOSSARY
HEADERS
FOOTERS
PAGINATION
MARGIN CONTROL
HYPHENATION
MERGING CONTROL
CHAINING
GLOBAL EDITING
PASSWORDS
MOVE
DELETION
INSERTION
SEARCH
LENGTH
SPELL CHECKING
DICTIONARY
INTEGRATION

E15

TOTAL

AVERAGE

#3

WORD PROCESSING SOFTWARE EVALUATION FORM

VENDOR NAME: _____

VENDOR ADDRESS: _____

VENDOR PHONE: _____ CONTACT PERSON: _____

SOFTWARE NAME: _____

HARDWARE NAME: _____

MEMORY REQUIREMENTS: _____

DISK DRIVE REQUIREMENTS: _____

PRINTERS SUPPORTED: _____

SOFTWARE PRICE: \$ _____

W.P. CHARACTERISTIC	REQUIRED (Y/N)	FEATURES SUPPORTED (Y/N):
---------------------	----------------	---------------------------

LEFT JUSTIFICATION		
RIGHT JUSTIFICATION		
HORIZONTAL CENTERING		
VERTICAL CENTERING		
PROPORTIONAL SPACING		
TABS		
INDENTATION		
UNDERLINING		
BOLD PRINT		
FONTS		
GLOSSARY		
HEADERS		
FOOTERS		
PAGINATION		
MARGIN CONTROL		
HYPHENATION		
MERGING		
CHAINING		
GLOBAL EDITING		
PASSWORDS		
MOVE		
DELETION		
INSERTION		
SEARCH		
LENGTH		
SPELL CHECKING		
DICTIONARY		
INTEGRATION		

SERN ID 1 1 4

Month Day Year

TOPIC 0 7 0 1

SERVICE 1 2 2

REQUESTER/HOST 8 0 0 0 1 1 9

WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
ADMINISTRATION: WORD PROCESSING

OBJECTIVE(S): Participants will be exposed to and practice word processing concepts, needs assessment, and software evaluation, focusing on administrative applications.

DIRECTIONS:

Complete the following by circling T for true or F for false at the end of each statement.

1. Generating a mailing list and running off mailing labels can be done with word processing software. T F
2. Before selecting a word processing software, a needs assessment should be completed. T F
3. It is relatively simple to reprogram most word processing software to meet the unique needs of a school site. T F
4. The software evaluation form used in this module analyzes needs and software characteristics, and helps identify specific characteristics needed in the software purchased. T F
5. A cursor is a marker which shows you where you are on the screen of a microcomputer. T F
6. The software we used in this training module is WordStar. T F
7. Sometimes when using software it is necessary to press a control key along with another key, to elicit a specific function. T F
8. "Text" refers to the directions at the top of the screen. T F
9. "Editing" refers to the ability to make changes in what has already been written into a file. T F
10. All word processing software offer the same features. T F

MICROADMIN PROJECT HOME WORK WORD PROCESSING MODULE

Using the word processing planning document (Word Processing Needs Assessment Form #2) select a task and analyze it as taught in the workshop.

Visit a computer store and ask to see a demonstration of one or more word processing programs which have the characteristics you identified as needed to do the selected task.

Write down the name, price, and system requirements of the software you saw demonstrated.

Make a list of the features you were able to see in the demonstration which matched your selected task characteristics.

Would you buy the software you saw demonstrated?

MICROCOMPUTER WORD PROCESSING

OVERVIEW OF WORKSHOP SESSION

PURPOSE(S): To provide staff developers with an introductory word processing workshop which they can deliver to special education administrators.

GOAL: Participants will be exposed to and practice word processing concepts, needs assessment, and software evaluation, focusing on administrator's applications.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	Script E-27		
10 Min	Agenda/Goal/Negotiations	Listen and discuss	Agenda/Goal Charts
5 Min	Elicit Word Proc. tasks. Explain Importance of understanding what you expect w.p. to do for you	List tasks	Charts
TRANSITION: Now that you have identified some tasks you would like to do with word processing, lets take a look at Magic Window on the Apple computer as an example of a word processing program.			
45 Min	Magic Window W.P. Tutorial Reviews Tutorial Conventions	Hands On Activity	Tutorial, Apple II Magic Window Disks

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
5 Min	Reviews Apple Keyboard Explain procedure for printing part of Tutorial	2 or 3 participants to each computer with printer	Data Disks One computer set
	Tutorial debriefing : Ask how they felt about w.p. and Magic Window in particular	Discuss how they liked/disliked W.P.	Chart
	Script E-28		
Transition: As you can see using word processing is fun and can save you a lot of work. The key to this is in selecting a system which matches your needs.			
10 Min	Introduce Needs Assessment Systems and Forms	Listen and review	Charts, 3 forms; #1 Micro Word Proc. #2 W.P. Plan. Doc. #3 Software Eval.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	Explain that #1 is a list of characteristics which may be found in word processing programs #2 is a planning guide which will let us match a particular tasks needs to w.p. characteristics #3 transfers those characteristics we must have in a w.p. program to a software evaluation form to be used when buying w.p. software Transition: We need to take a little time to examine some of the main characteristics we will need in a word processing program if we are to be successful in accomplishing our tasks.		
25 Min	Using #2 go through each characteristic, explain and give examples. Ask participants questions as you explain to verify their understanding of the characteristics	Listen Respond	Form #2, Charts

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
Transition: Lets see if we can put into practice what we have experienced today.			
15 Min	Script E-29 Software Evaluation Using list of tasks generated by group, identify one and go through each characteristic to see if it is needed to accomplish that task. Using Magic Window as a model, evaluate it against this list of needed characteristics	Discussion	Charts, List
Transition: Thank you for your attention and participation and we hope you feel more confident in your ability to select and use word processing software.			
5 Min	Closure	Comments	

MICROCOMPUTER WORD PROCESSING
A/V SHEET

AV SHEET

List of Materials (attached by number)

1. Agenda
2. Magic Window Disk and documentation- one for each computer or "right to multiply-boot"
3. Magic Window Data Disk with sample files used in Tutorial
4. Magic Window Tutorial including Editing Command Summary
5. Word Processing Needs Assessment Forms:
 - #1. Microcomputer Word Processing
 - #2. Word Processing Planning Document
 - #3. Word Processing Software Evaluation Form

Equipment

1. Apple II and monitor or equivalent (2 participants per machine)
2. Minimum of one printer
3. Chart rack, overhead, board or equivalent
4. Colored pens, etc.
5. Tape

MICROCOMPUTER WORD PROCESSING
SCRIPT

Section E
Desk III
G. S

INTRODUCTION TO WORD PROCESSING

GOAL: To provide an introductory experience with:

- a: a word processor (Magic Window),
- b: a process for the assessment of needs,
- c: an evaluation and selection of word processing software.

Points to Cover/Script:

1. *Discuss the agenda. Go over the major activities and time allotments. Ask if this meets the expectations of the group. If there are unmet expectations, discuss them. If it is possible, include activities or information which the group desires. Be flexible. Have the group introduce itself and indicate prior experience if any, with word processing.*

2. *Use the chart to keep records. Ask the group to generate a list of tasks (things they do in their work) for which they think they could use word processing (it doesn't matter if the activities are appropriate to word processing). Post this list on the wall as you will use it later.*

TRANSITION: Now that you have identified some tasks you would like to do with word processing, let's take a look at Magic Window on the Apple computer as an example of a word processing program.

3. *Hand out the Magic Window Tutorial (including the Summary of Editing commands), the Magic Window Disks, and the Data Disk. Review how to handle disks, (not to bend, place on t.v., etc., do not touch the open area). Show how to place disk in computer drive (open door, hold disk with label up, insert disk, close door).*

4. *Review the Apple keyboard (control key, esc key, arrow keys, delete key, open apple keys, difference between right arrow and space bar, use of #1 not "I",). Demonstrate how to turn on computer*

and monitors. Review page one of Tutorial handout (go over the conventions):

- step in the tutorial where user action required

- "/" a key on the computer to be pressed

MAGIC WINDOW underlined means something on the screen

'Noow is the' things inside of the apostrophes mean to type that on the screen NOT including the apostrophes (" ")

5. Tell the participants that when they are ready to print out their memo, to follow directions on the screen, save the memo and take the disk to the computer which has the printer attached.

6. Be available during the tutorial to help those who lose track of the sequence of events and to answer questions. If participants follow ALL steps and directions in the Tutorial, they will be successful.

7. Indicate that a summary of editing commands are included at the end of the tutorial. Have them begin work.

8. The tutorial including the above directions should be complete within a 45 min time frame. Not all participants will finish all the activities. Let them know that it is o.k. and there may be time later for them to do any activity that they didn't complete.

9. After completing the tutorial have the group discuss the experience. Focus on their likes and dislikes of the program. Chart if appropriate.

TRANSITION: As you can see, using word processing is fun and can save you a lot of work. The key to this is in selecting a system which matches your needs.

10. Pass out the Needs Assessment forms (#1-#3). Form #1 is a listing of characteristics common to word processing programs. Using these characteristics as a base, you will teach them a process for matching their needs to word processing software, enabling them to make good software selections.

TRANSITION: We need to take a little time to examine some of the main characteristics we will need in a word processing program if we are to be successful in accomplishing our task.

11. Tell them to look at form #2 (planning document). Explain that a list of three or four tasks to be computerized (word processing) should be listed down the left side of the page (these should be the priority tasks for this application). Each characteristic of word processing is listed across the top. For each task you will determine if the characteristic is required, desired, or not needed. A 3, 2, or 1 is placed respectively in the corresponding space.

12. Fill in the spaces for all tasks. Add up the numbers and average for each column.

Example:

	underlining <---- characteristic
letters	2
student evaluations	3
forms	1

total	6
average	2 <---- total 6 / 3 tasks = 2)

This indicates the characteristic of "underlining" is desirable but not absolutely needed in the user's selection of word processing.

13. Use the planning guide. Go through each characteristic and explain it to the participants using suitable examples.

14. Explain that the software evaluation form takes the information computed on the Planning Document and looks at one piece of software at a time. The participant having done the full analysis would take the software evaluation form with them to a vendor and tell the salesperson to show them a system that had the indicated characteristics (which the participant must have to do his priority tasks).

TRANSITION: Let's see if we can put into practice what we have experienced today.

15. Go back to the list of tasks the group generated. Have the participants choose 2 or 3 items to "run" through the process. Fill

out a form on a chart rack for those two items and then ask the group to determine if Magic Window would be a suitable selection. Have the group use the software documentation to find software characteristics they may be unaware of. Discuss their findings.

TRANSITION: Thank you for your attention and participation and we hope you feel more confident in your ability to select and use word processing software.

16. Bring the session to a close by reviewing the steps for selecting word processing software:

- A. understand very clearly what you want the computer to do*
- B. break these tasks down into characteristics*
- C. look at software which has the needed characteristics*
- D. buy only after you preview based on your needs and analysis*

ADMINISTRATIVE PLANNING
PARTICIPANT PACKET

MICROCOMPUTER PLANNING DOCUMENT

Answer each question. If any given section has questions you are unable to answer, more planning is needed.

1. What are three things you would like to do with a computer system?

- a.
- b.
- c.

2. Of the above, take one which you are currently doing without a computer.

a. Why do you want to computerize this task?

b. How much time does this task currently take?

c. How much does it cost you (in dollars) to do this task?

3. Use the rest of this page to describe as accurately as possible what is involved with this task. Imagine yourself sitting at a computer doing this task. What will be the various steps involved? Where will needed information come from? What do you want to "come out" of the system, reports, etc.? What information will be stored in the system? How much information will be stored in the system? How quickly does this information change, grow and need to be revised? [Note: the more detail you are able to produce in describing the task(s) to be done the greater your chance of developing a system that will work for you.]

4. How much money do you have to devote to a computer system?
\$ _____

5. How much time per week do you have to devote to a computer system? _____

6. Who on your staff will be available to work on the system?

- a.
- b.
- c.
- d.

7. What do the people listed above already know about computer systems (training or knowledge)?

8. Based on your analysis in number 3, list the software you have evaluated whose characteristics best match the functions needed to carry out the task(s).

- a.
- b.
- c.

9. What is the cost of the software listed in number 8?

10. What hardware have you evaluated which will "run" the software listed in number 9?

- a.
- b.
- c.

11. What is the cost of the hardware listed in number 10?

- a.
- b.
- c.

12. What operating system(s) will you need to "run" the software listed in 9 on the hardware listed in 10?

(What if any is the cost of this operating system?)

- a.
- b.
- c.

13. What peripheral devices will you need to accomplish your task(s)?

(What are the costs including required interface devices, cables and supplies?)

- a.
- b.
- c.
- d.

14. Who will configure the system for you (set up/installation, interface of peripherals to computer, software programming, etc.)?

(What will the costs of this service be initially and ongoing?)

- a.
- b.
- c.

15. How will you and your staff be trained to run the computer system?

(What is the cost initially and ongoing of training?)

- a.
- b.
- c.

16. How much money will you allocate from your original budget for maintenance of the computer including supplies and service? (Will you buy a service contract, train individuals to fix down hardware, service on an as needed basis, etc.?)

\$ _____

17. Will the cost in terms of money, time, and personnel yield benefits which are significantly greater than the outcomes produced by the current system for performing the task?

18. Did you allocate enough money for this system in number 4?

19. If your answer to number 18 is no, from where will the additional funds come?

POSSIBLE QUESTIONS

Why use a microcomputer? What makes them a good or bad choice?

What are the significant characteristics of hardware to consider before buying?

What are the major software components that must be considered before buying?

What is an Operating System and what considerations are there before buying one?

What is a computer language? What are the most common ones?

What are the major types of general purpose software? What are some examples of tasks related to each type?

What is integrated software and what should I consider before buying?

What are the major microcomputer peripherals and their features? What will I need to know to "hook" them up to my computer?

What is meant by "back up" and do I need to do it? If so what do I need and how do I do it?

What is a local area network?

Can microcomputers be connected to mainframes and minicomputers?

How can I get equipment and software maintained or repaired?

What legal responsibilities (copyright and licenses) do I need to be aware of?

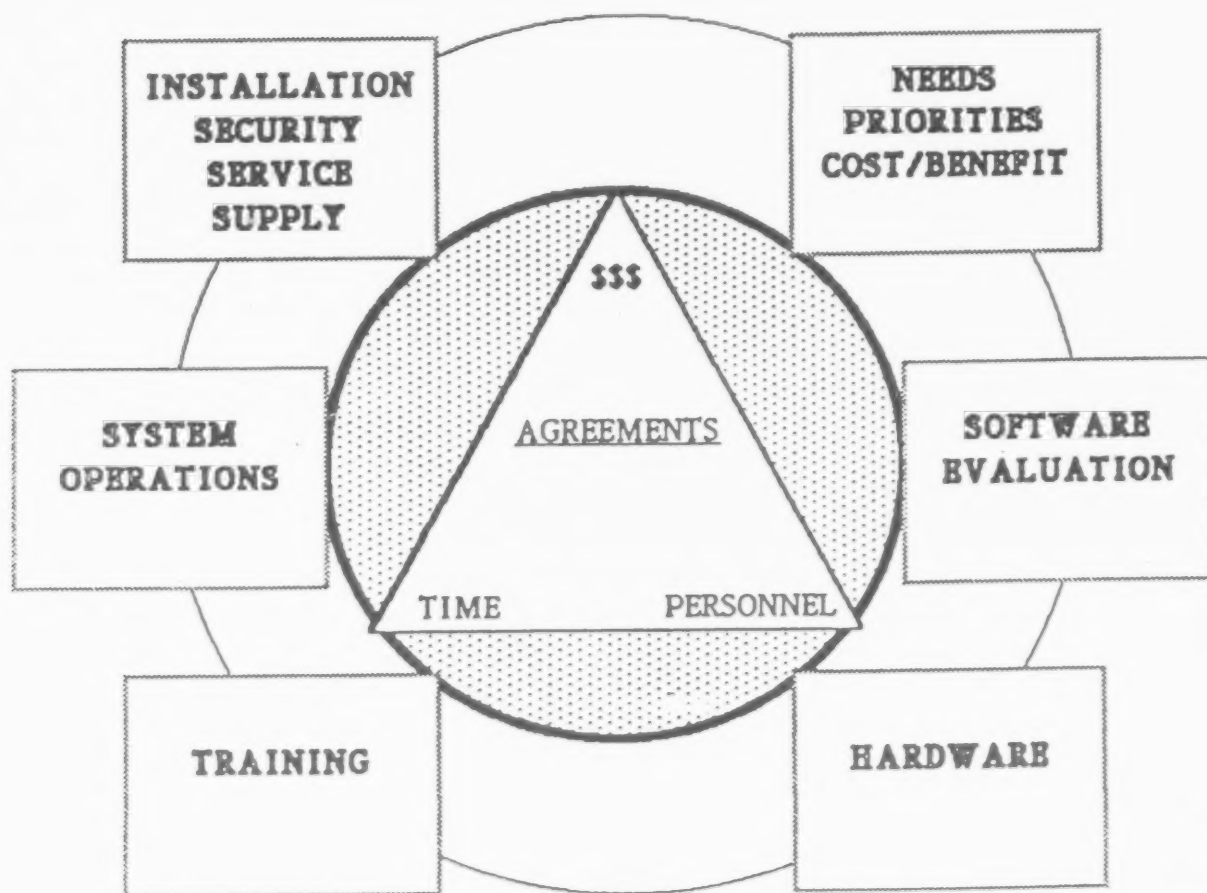
Where can I get training? How should I evaluate training?

What are some suggestions for getting started?

What is the difference between managing technology and using it?

Who on my staff should be involved in the use of technology?

**ADMINISTRATIVE
PLANNING GUIDE FOR
MICROCOMPUTER APPLICATIONS**



WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
ADMINISTRATION:
ADMINISTRATIVE PLANNING

OBJECTIVE(S): To introduce planning diagrams and pert charts.
To attempt to assess the needs of a hypothetical client. As a group
to come to consensus and formulate a statement of an agreed upon
need and subneed(s).
To develop a plan for meeting site needs.

DIRECTIONS:

Complete the following by circling T for true and F for false at the end of each statement.

1. Needs and values have to be weighed in terms of cost and benefits, and then prioritized and ranked. T F
2. Some software works easier than others. T F
3. A good rule of thumb is that cost is an indicator of quality, capability and ease of use. T F
4. One way to expand your hardware is with a hard disk. T F
5. To prevent problems assign one key person to the management responsibilities of your system implementation and operation. T F
6. Service warranties are available for hardware. T F
7. A PERT chart can be generated by a microcomputer, and can show the order of tasks involved in a project. T F
8. Failing to check with your financial office may hold up the purchase of your system. T F
9. After installing a system in your office, no training should be necessary if the software is user friendly. T F
10. The more detail you are able to produce in describing the task to be done in your office, the greater your chance of developing a system that will work for you. T F

MICROADMIN PROJECT HOMEWORK ADMINISTRATIVE PLANNING

LOOK AT THE FOLLOWING LIST OF USES OF MICROCOMPUTERS, WHICH DO YOU THINK WOULD BE MOST HELPFUL FOR YOU?

Student Applications

Scheduling
Grade reporting
Grade and Transcript information
Daily & Summary attendance accounting
Student & Family Demographic Info
Health records
Instructional management
Test scoring
Generating fees statements
Generating, Managing IEP plans & reports

Office Applications

Filing systems
Word processing
Generating letters to parents, etc.
Mailing list & Labels

Personnel/Facilities/Equipment Mgt.

Staff assignments & scheduling
Personnel records

Room assignments/utilization

Inventories of equipment, books etc.

Bus Routing

Maintenance scheduling

Library management, cataloging, circulation etc.

Financial Research & Planning Applications

Budgeting, accounting

Purchase order generation & tracking

Budget forecasting

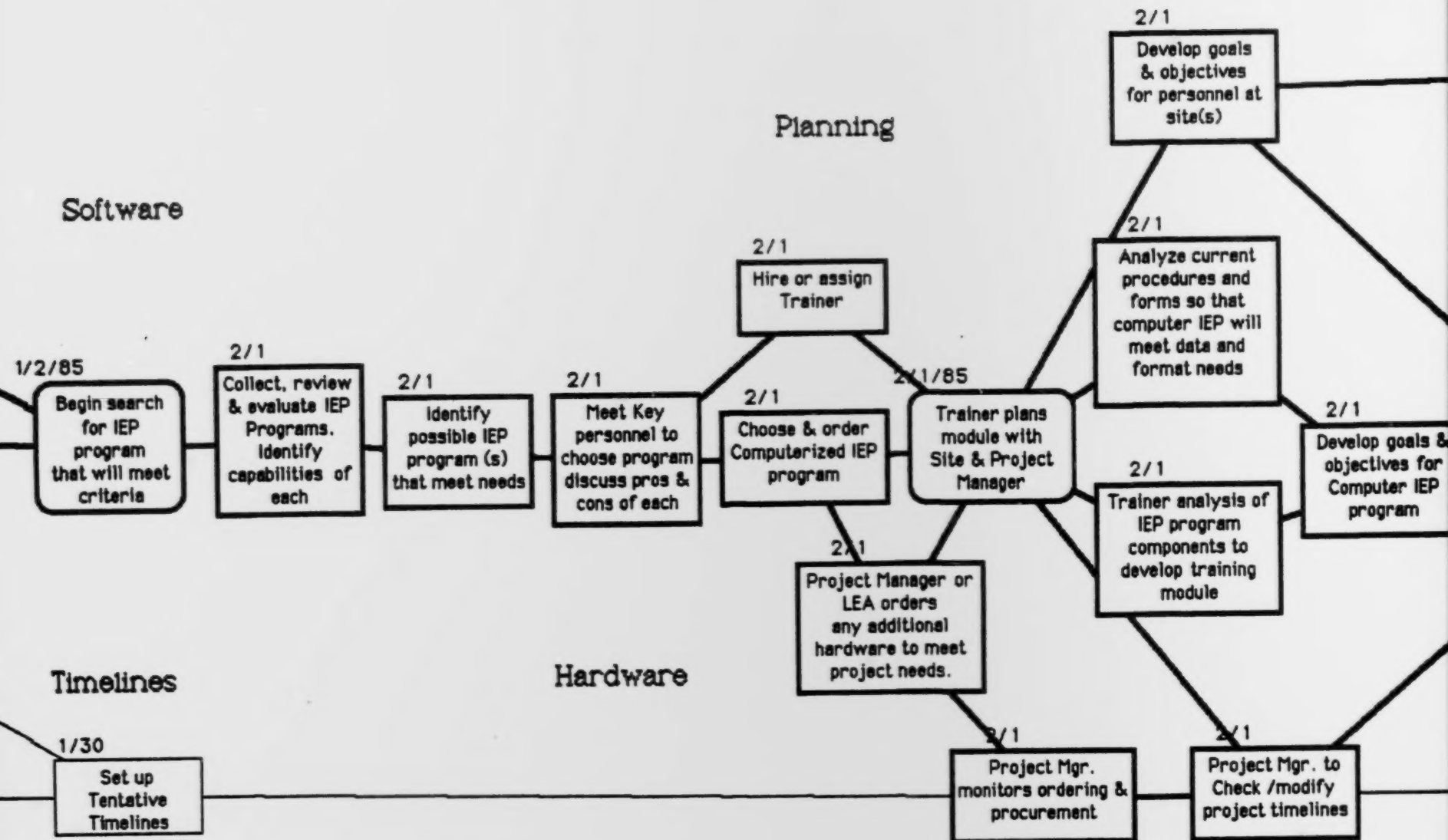
Statistical analysis

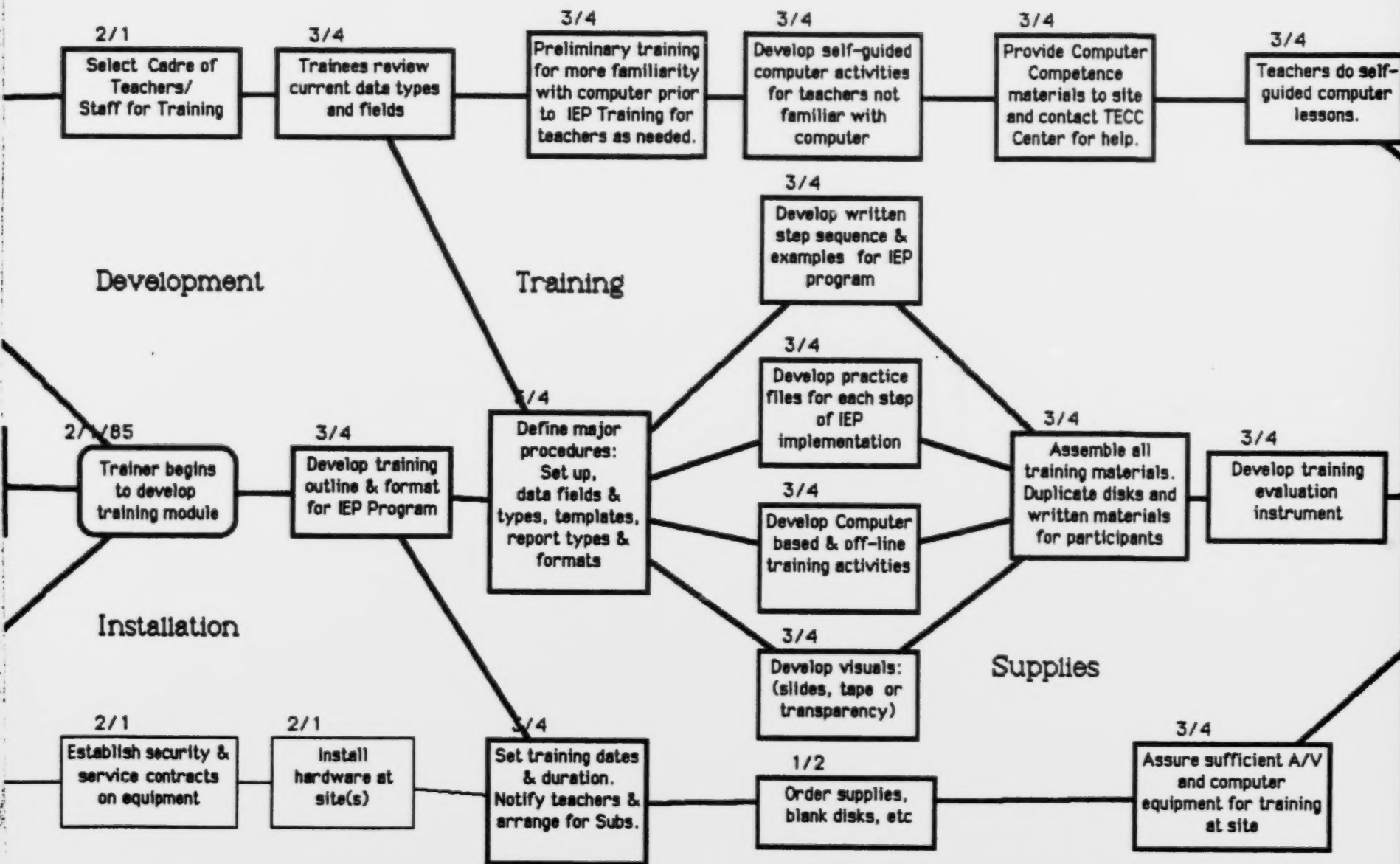
Test item analysis

Project Planning & Eval (PERT)

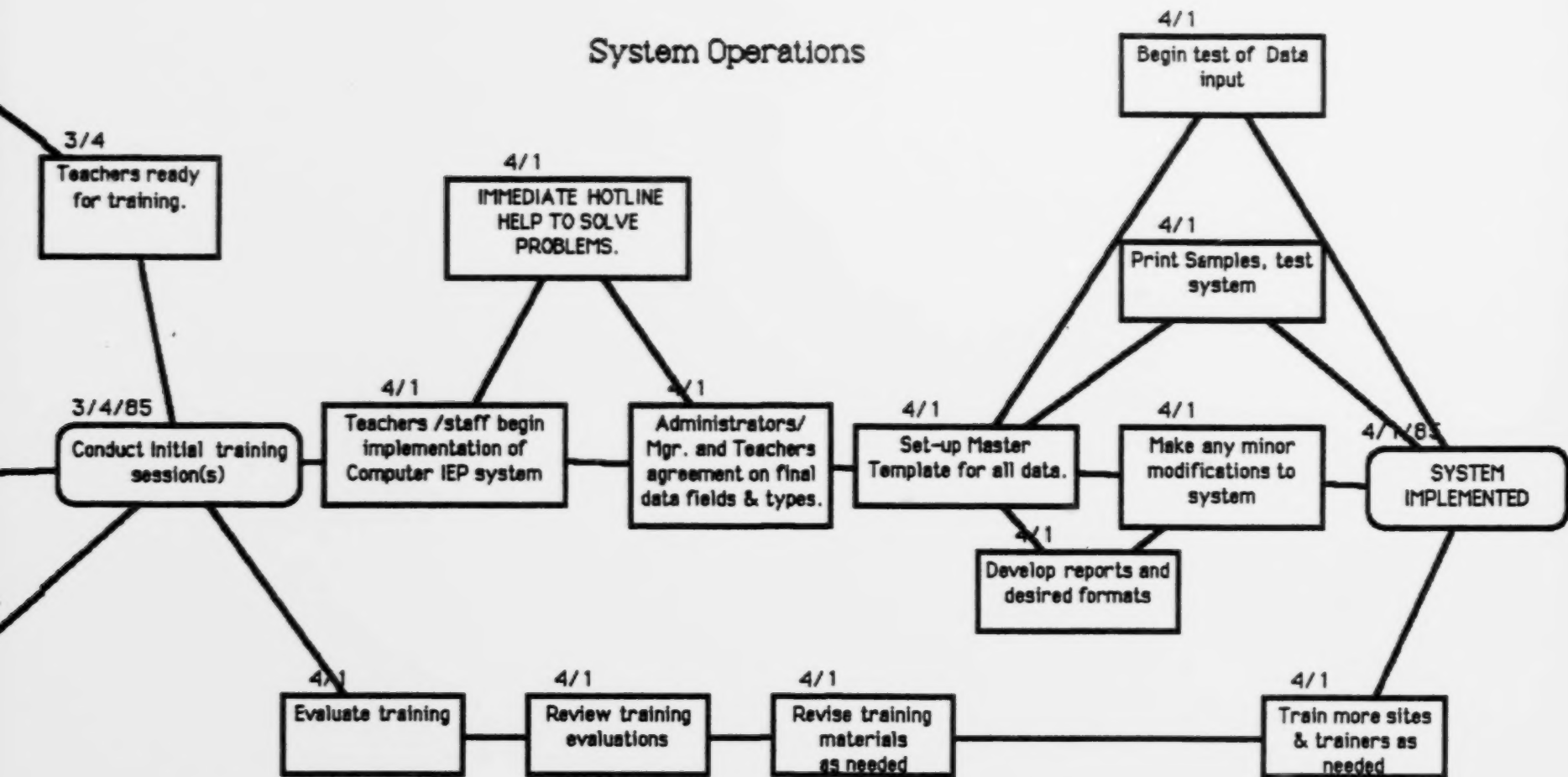
98







System Operations



NOTES?

ADMINISTRATIVE PLANNING

ADMINISTRATIVE PLANNING

PURPOSE(s): To acquaint the participant with the planning process and its components, and to have an opportunity to apply the process.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
5 min	Script pg F-26 Greetings, state purpose of module		
TRANSITION: We're going to begin today with definitions and an example of a planning process.			
15 min	With script and own experience describe the need for planning and the administrative planning diagram. Define the elements, tell how they interact and then show their	Listen, discuss, then find corresponding items on PERT chart. Decide most important issue	Script packet for participants planning. Diagram PERT chart

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
	application on the PERT chart. Script pg F-27 Activity 1: Ask participants for their biggest need.		
TRANSITION: Now you can begin to apply these fundamental principles to your own situation and needs.			
15 min.	Script pg F-29 Activity 2 Ask participants to look at and start to fill out the microcomputer planning document. Put one or two of each person's needs on the wall chart.	Begin to fill out planning guide document	Planning Guide Script Chart

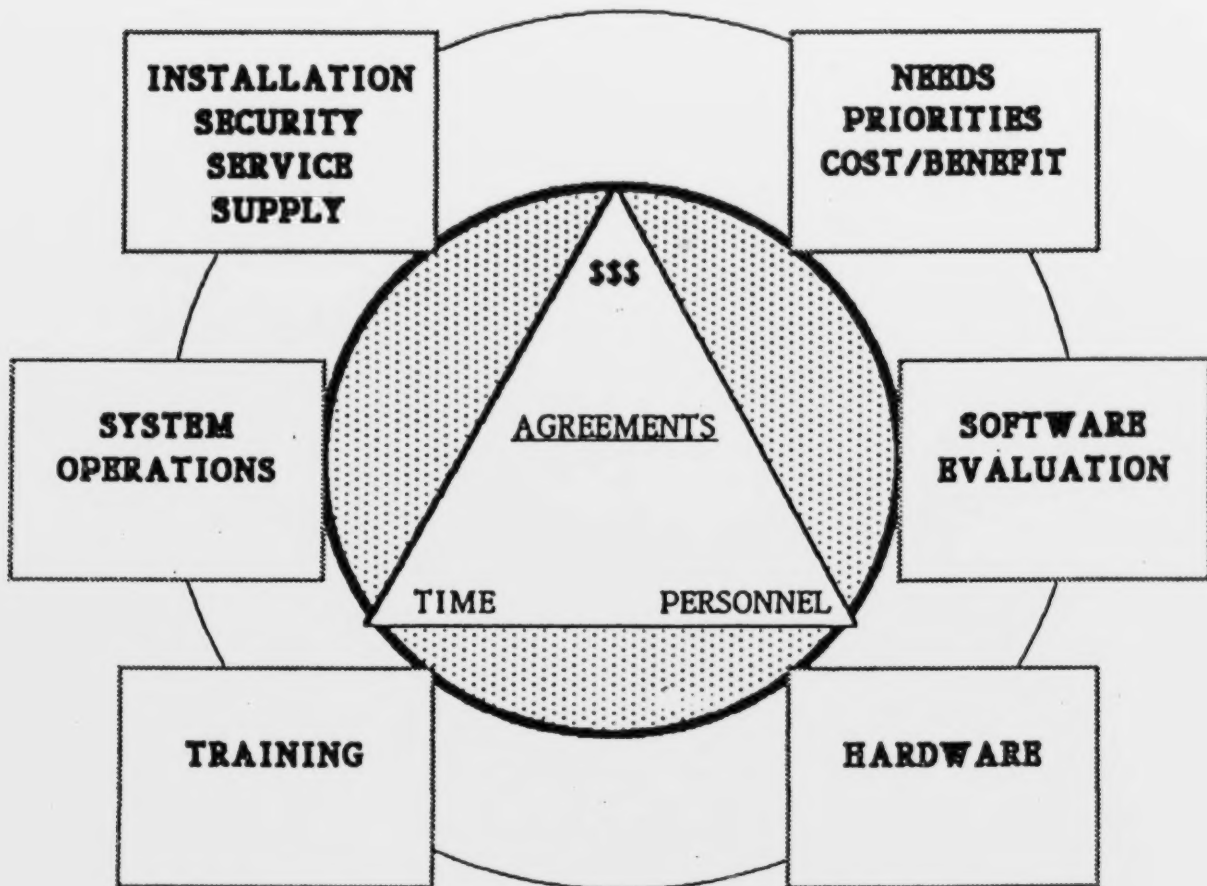
TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
TRANSITION: We are going to continue this concept so you can start to apply what you know.			
15 min.	Script pg. F-30 Activity 3 Introduce activity with script once it is started, visit each group to get/ give feedback.	Break into small groups. As part of the committee, complete the exercise.	Script "Group Exercise 1" Chart paper
TRANSITION: Let's hear what each group decided.			

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
15 min	Script pg. F-32 Activity 5 Reconvene as a Large Group Discuss results and impressions of previous activities.	Move seats Respond to questions and comments.	
<u>TRANSITION:</u> Let's look at the <u>Planning Guide Self-Evaluation.</u>			
15 min	Script pg. F-33 Activity 6 Guide is used to address important specific issues	Review Guide. Ask questions.	Microcomputer Planning Guide

ADMINISTRATIVE PLANNING
AV SHEET

ADMINISTRATIVE PLANNING
TRANSPARENCY

**ADMINISTRATIVE
PLANNING GUIDE FOR
MICROCOMPUTER APPLICATIONS**



ADMINISTRATIVE PLANNING
SCRIPT

ADMINISTRATIVE PLANNING AND NEEDS ASSESSMENT

GOAL: To introduce the planning diagram and PERT chart.

Points to Cover/Script:

TRANSITION: We're going to begin today with definitions and an example of planning process.

You see the planning guide diagram noting 6 major areas or elements for planning and implementing the use of microcomputers. The triangle in the center reminds us and emphasizes the fact that each of the elements requires time, money, personnel, and agreements among all involved parties as to each person's or group's responsibilities in the matter. Time, funding, and personnel then would continue to be addressed for the duration of the event.

The areas or elements around the circle may represent a onetime event or an ongoing process of implementation, evaluation, or refinement. They must be completely interrelated with each other for the system to work. When things don't work or don't progress, look at the circle or the triangle and try to define which components are lacking. Briefly, these are:

NEEDS: Consider levels of need by school personnel, the uses of various applications and their value to the school in terms of time saved and services improved. Since we rarely get all that we want, these needs and values have to be weighed in terms of cost and benefits and then prioritized or ranked. Since we are planning, consider anticipated future needs as well as the present ones.

SOFTWARE EVALUATION- Each software program does different things. There are none that are exactly the same. Some are easier to work. Cost is not an indicator of quality, capability, or ease of use. We need to look closely at the features offered by the programs and pick the one that meets our needs. Each of the modules we will present will have software evaluation guidelines.

HARDWARE CAPABILITY AND COMPATIBILITY - Once you have chosen software that will do the tasks you want, you need to acquire hardware to run it. If there are versions of the program to run on several different computers then consider the one that is most easily expandable to meet future needs. You may expand with a hard disk, network or mainframe, or you may want to expand to other sites. In that case you would want to use the computers that they already have at their sites.

TRAINING - Since many of these applications are new, it is reasonable to plan for at least a small amount of training time to bring folks up to speed quickly so the momentum is not lost. Some programs take more training and thus it may be advantageous to bring in a trainer or consultant from the company who sold the program.

SYSTEM IMPLEMENTATION AND OPERATION - Allow time and support for the system to be implemented and stay in operation. Usually a key person is assigned the management responsibilities. This prevents problems down the line.

MAINTENANCE ISSUES FOR BOTH HARDWARE AND SOFTWARE: The nuts and bolts of a high-tech system that are so obvious they are sometimes ignored.

- INSTALLATION
- SECURITY
- SERVICE AND WARRANTY
- SUPPLY

PERT CHART

This four-page chart shows the order of tasks that were involved in making decisions to actually implement a program managing I.E.P's. We will discuss this in detail when we get to that module. For now, just notice the elements, the order of occurrence and re-occurrence and their importance in the planning process.

ACTIVITY 1: Look at your planning guide diagram and your PERT Chart. Find the elements from the diagram on the PERT Chart. Find as many task boxes as you can that relate to each element. Notice that different personnel are used throughout. We will look at this in more detail later when we discuss the implementation of the I.E.P.

WHAT DO YOU THINK IS GOING TO BE IMPORTANT IN YOUR PLANNING PROCESS AND WHY?

TRANSITION: Now you can begin to apply these fundamental principles to your own situation and needs.

ADMINISTRATIVE PLANNING: CONSULTANT SIMULATION ACTIVITY

GOAL: To attempt to assess the needs of a hypothetical client. As a group, to come to consensus and formulate a statement of an agreed upon need and sub-need(s) if appropriate.

Points to Cover/Script:

ACTIVITY 2: *In groups of three to five, participants meet with and interview their clients. As a result of this discussion, they will then formulate a needs statement that includes needs and sub-needs.*

Now that we have discussed the main elements of administrative planning, we are going to focus on the applications of these concepts as a consultant. You will interview a prospective school client to assess needs and formulate plans. You may use the steps and guides that you have, plus your own background.

Break into groups of 3-5 individuals in order to interview your client. Ask questions and have a discussion for 10-15 minutes. Then meet as a small group and discuss and rank needs. Come to a consensus as to the needs and sub-needs of your client. After developing this needs statement, discuss the "findings" with your "client" and revise as needed.

*[**Note we would like for you to do this task in an interview and discussion format, using your background and the models given you. If you are stuck then you can use the list of interview questions provided. Try to do it on your own, based on your interaction with the client, first.]*

TRANSITION: We are going to continue the process and start to apply what you know.

DEVELOPING A PLAN OF ACTION

GOAL: To develop a plan for meeting the previously defined site needs.

Points to Cover/Script:

ACTIVITY: *As a committee, the same groups develop a plan for meeting the site need or implementing a solution. This includes the goals, tasks, timelines. etc. You may use the chart, cards or whatever is appropriate to meet your needs.*

Now that each team has defined the needs of its clients, each needs to develop a plan for implementing a solution to those needs. In the next 15 minutes begin to develop a plan. This should include your project goal, the tasks involved and the timelines you might expect plus any other information you deem pertinent.

TRANSITION: Let's hear what each group decided.

MODELING THE PROCESS AND GETTING FEEDBACK

GOAL: To provide the groups' plan for implementation of the solution to the client for feedback/negotiation and reality check.

Points to Cover/Script:

ACTIVITY: *The group spokesperson will present the plan, its goals, tasks and timelines to the client. The client will provide feedback and then describe what actually happened in the project.*

Now that you have developed a plan, with tasks, timelines, and other necessary information, chose a spokesperson to present the plan to your client. Discuss it. Identify what will work. Based upon feedback, make necessary revisions. When this process is completed, the "client" will share with you what really happened in their component of the project.

TRANSITION: Let's move our chairs back together, and talk about what we've just done.

DEBRIEFING

GOAL: To debrief, share ideas, and receive feedback on the simulation activity.

Points to Cover/Script:

ACTIVITY: *Participants reconvene as a large group and discuss results and impressions of the previous activities. Consider the points raised by the trainer.*

Let's talk about this activity. How was this process for you?

What did you learn?

What information do you need to be able to do this?

Based on your experience, how would you modify this activity to be more successful?

TRANSITION: Let's look at the Planning Guide Self Evaluation.

BEGINNING THE PLANNING PROCESS

GOAL: To provide guidelines and materials for the Planning Guide Self-Evaluation to use when they train or consult.

Points to Cover/Script:

ACTIVITY: *Participants will look at the GUIDE*

Look at this microcomputer planning guide. This is for you and your client to use in order to address important, specific issues. Clients would go through this self-evaluation questionnaire and try to be as thorough as possible in their responses.

**DATABASES
PARTICIPANT PACKET**

INTRODUCTION TO DATA BASE MANAGEMENT WORKSHOP
AGENDA

<u>ACTIVITY</u>	<u>TIME</u>
Introduction	10 min
Database Tasks vs. File Handling	15 min
PFS Hands On Tutorial	45 min
Tutorial Discussion	15 min
Needs Assessment and Software Selection	55 min
Closure and Evaluation	10 min

MICROCOMPUTER DATA BASE/FILE MANAGEMENT

A data base file management system is a program which allows the user to create an electronic filing system. This system may be used to collect, organize and disseminate different types of information dependent on the requirements of the user. The system should have the ability to generate reports to print collected information in formats most useful for users of the information.

TERMS

Data Base - A filing system of specific data organized for a particular application

Data Base Model - A conceptual organization of information

Edit - Changing information which has already been entered into a record

Field - An item of information

Field Type - Fields specified for a specific kind of data
(alphanumeric, numeric, computed, and date)

Alphanumeric - Letters and numbers, i.e. and name, address, etc.

Numeric - Real numbers, decimal (floating point), integer, etc.

Computed - Numeric field formed by a computation of other numeric fields

Date - Date format, i.e. 12/12/83, 12-12-83, etc.

File - A unique system of information storage, made of many individual records using the same form

Form - A collection of pages related to the same file

Input - Putting information into a field

Page - Screen display of fields

Primary Key - A combination of fields which will make each record unique and quickly accessible

Record - A form in which information has been entered

Report - A collection of records or parts of records generated by a sort and select process

Select - Manipulation of data so that specific records are chosen by looking at a specific field or combination of field information

Sort - Reorganizing records into a specific order based on a field or a combination of fields

FILE HANDLING SYSTEMS

The following are some general characteristics of file handling systems which should be considered:

Ease of operations

Data entry formatting on screen

Single program operation

Single data file

Multiple pages of data per item often possible

Data updated as entered

No data editing capability

Ability to retrieve selected records

Sequential search

Print Format - limited flexibility

Limited arithmetic calculation ability

Add-on Programs often available

DATABASE SYSTEMS

The following are some general characteristics of database systems which should be considered:

- Large number of individual data items
- Direct commands plus pre-programmed commands
- Maximum flexibility of calculations
- Maximum report format flexibility
- Each data element totally controlled for use, placement screen and printer.
- Data from multiple files can be combined
- Complex logic checks for data validity possible
- Direct access to all data
- Combined data sequencing available
- Harder to learn than file handlers
- Most functions available through pre-programmed "menus"

PFS:FILE TUTORIAL

In the following tutorial we will use PFS:FILE to create a data base/file management system for the tracking of microcomputer software. The following conventions will be used:

CONTROL C - hold the Control key down while pressing the C key. The Control key is always used in conjunction with another key.

- - indicates each step in the tutorial where an action is required by the user.

"RETURN" - anything in quotes indicates key or keys you will type.

FILE NAME - anything underlined indicates something you will see on the computer screen.

'MASTLIB' - anything between ' ' indicates something you will type into the computer.

TYPE - means press the letter or character keys which follow.

1. BOOTING PFS:FILE

- Place the PFS:FILE diskette into the disk drive with the label facing up.
- Close the disk drive door.
- Turn on the microcomputer.
- WAIT (approximately 15 seconds) until you see the PFS FUNCTION MENU.

NOTE [may need to do

• ^ "reset"

• PR#6

to turn disk drive on if computers are on a network.]

2. Designing a file/form

- Press the "1" key (indicating we will be designing a file.)
- Press the "right arrow key" (this moves the cursor next to file name).

NOTE [may need to press "TAB" instead.]

At this time we need to name our system. The name we will use is 'MASTLIB'.

- Type 'MASTLIB' into the computer.
- Press **CONTROL C**

You should now see the DESIGN FILE MENU.

- Press the "1" key.
- Press **CONTROL C**

You should see the following: PUT DISKETTE IN DRIVE ONE. WARNING!
THE DISKETTE IN DRIVE ONE WILL BE COMPLETELY OVER WRITTEN..

- Open the disk drive door and remove the PFS:FILE diskette (place it in its envelope).
- Take the blank diskette and place it on the disk drive.
- Close the disk drive door.
- Press the "CAPS LOCK" key.
- Press **CONTROL C**

At this time the disk drive will go on, indicated by the red light on the disk drive. The system is initializing the diskette and writing system information to it. This diskette will always be used when we are accessing the file created called "MASTLIB". This process takes approximately 15 to 20 seconds. At the completion of this process you will see a screen with a cursor blinking at the top left and written information on the bottom. That information indicates how much of the file space has been used, the name of the file, the fact that we are in the design mode, and the page of the particular form we are creating.

The next step is to create the actual form we will use to enter and store data into our file. We will now type in the labels (or names) for each field (individual piece) of information.

- Type in the following: '**PROGRAM NAME:**' (make sure to

include the colon)

You will see (on your screen at the top left) the label **PROGRAM NAME** with the cursor immediately to the right of the colon.

- Press the "RETURN" key twice to move the cursor down two lines.

We are now ready to enter the second field label.

- Type in 'CURRICULUM:'
- Press the "RETURN" key two times to move the cursor down two lines.
- Type in the field label 'GRADE LEVEL:'
- Press the "RETURN" key two times to move the cursor down two lines.
- Type in the field label 'PRODUCER:'
- Press the "RETURN" key two times to move the cursor down two lines.
- Type in the field label 'FORMAT:'
- Press the "RETURN" key two times to move the cursor down two lines.
- Type in the field label 'COMPUTER:'

You have just completed creating the form in which data will be entered for the file name MASTLIB. Your screen should look exactly like the following:

PROGRAM NAME:

CURRICULUM:

GRADE LEVEL:

PRODUCER:

FORMAT:

COMPUTER:

0%FULL
FILE MASTLIB DESIGN PAGE 1

If your screen does not look like the preceding, corrections may be made by moving the cursor around the screen and retyping the correct information as follows:

Pressing the "BACK ARROW" moves the cursor one space to the left.

Pressing **CONTROL T** moves the cursor one space up.

Pressing **CONTROL V** moves the cursor one space down.

Pressing **CONTROL G** moves the cursor one space to the right.

Pressing **CONTROL F** moves the cursor one space to the left.

Pressing "RETURN" moves the cursor to the beginning of the next line.

Move the cursor around the screen typing over any errors you may have until your screen looks exactly as indicated in the tutorial. Use the "SPACE BAR" to erase characters on the screen. **WARNING: DO NOT PRESS THE "ESC" KEY. PRESSING "ESC" RETURNS YOU TO THE PFS FUNCTION MENU WITHOUT SAVING YOUR FORM.**

PFS:FILE has a maximum of 50 items per screen. It is possible to have as many as 31 additional pages with any form. We will not require additional pages for the file MASTLIB.

When your screen looks the same as the sample you are ready to move on.

- Press **CONTROL C**

This stores your file to the disk and returns you to the PFS FUNCTION MENU. We are now ready to add information to our file. We accomplish this by utilizing the add function on the PFS FUNCTION MENU.

3. ADDING DATA

- Press the "2" key.
- Press **CONTROL C**

You will see your file screen once again. This time the field labels are highlighted. The cursor will be to the right of the first field label, PROGRAM NAME. We will enter ten records into our file. We will do this by typing information into the form we have created.

We will fill in the first form now.

- Type in 'MUSIC MAJOR'.
- Press the "RIGHT ARROW" to move to the next field.
NOTE [you may be able to press "TAB" here.]
- Type in 'MUSIC'.
- Press the "RIGHT ARROW" to move the next field.
NOTE [you may be able to press "TAB" here].

Remember, if you make a mistake use the "BACK ARROW" and/or "CONTROL T" to move up and "CONTROL V" to move down. Correct any mistake you may have made. We are on the third field which is GRADE LEVEL

- Type in 'E'
- Press the "RIGHT ARROW" to move the next field.
- Type in 'EDUCATIONAL SOFTWARE'.
- Press the "RIGHT ARROW" to move to the next field which should be FORMAT.
- Type in 'DISK'
- Press the "RIGHT ARROW" to move to the last field, COMPUTER.
- Type in 'ATARI'.

You have now completed data entry for the first form or record in your file. To continue:

- Press "CONTROL C"

You should now see a blank form labeled FORM TWO at the bottom of the screen. Using the following chart to complete the nine forms. At the completion of each form press "CONTROL C" to go to the next form. Correct any mistakes using the cursor movements. Do not be concerned if a mistake gets entered into the file. We will learn to make that type of correction later. Enter the remaining information now.

PROGRAM NAME	CURRICULUM GRADE	GRADE LEVEL	PRODUCER	FORMAT	COMPUTER
OPPOSITES	READING	E	HARTLEY COURSEWARE	D	APPLE
MENDELIAN GENETICS	SCIENCE	S	CAROLINE SOFTWARE	D	APPLE
LETTERS AND NUMBERS	LANGUAGE	E	TEACHERS PET	D	PET
CATALOG WRITER	MANAGMENT	A	TECH ASSOCIATES	D	APPLE
ADDITION & SUBTRACTION	MATH	S	SOUTHWEST ED PSYCH	C	TI-90
THE MATH MACHINE	MATH	S	SOUTHWEST ED PSYCH	D	APPLE
ARITHMETIC GAMES 2	MATH	E	SRA	D	IBM
DRIVER EDUCATION	DRIV. ED.	S	MICRO-ED	C	PET
BERMUDA TRIANGLE	READING	S	ENCYCLOPEDIA BRITANIA	D	APPLE
MUSIC MAJOR	MUSIC	E	EDUCATIONAL SOFTWARE	D	ARARI

NOTE: [abbreviations used as follows: E-Elementary, S-Secondary, A-All, D-Disk, C-Cassette].

Now that you have entered all of the information as indicated:

- Press the "ESC" key

to return to the main menu.

4. SEARCH/UPDATE FILES

Now that a file has been created and data entered you may have times when you wish to view a specific file or change the data entered. (Any errors entered into the file can be corrected through this function.)

From the PFS FUNCTION MENU select the SEARCH/UPDATE function

- Press the "4" key.
- Press "CONTROL C"

You will see a blank form from your file MASTLIB. By entering specifications into the blank field(s) you can retrieve a form. We will retrieve a form and make changes to the data previously entered.

- With the cursor to the right of PROGRAM NAME, type in 'THE MATH MACHINE'
- Press "CONTROL C"

You should see the complete form/record which holds the data for THE MATH MACHINE. In this file, PRODUCER, has been incorrectly entered. We will change that now.

- Press "RIGHT ARROW" three times bringing the cursor next to PRODUCER:
- Type 'SCOTT FORSMAN' over SOUTHWEST ED PSYCH.
- Press the "SPACE BAR" four times to blank out SYCH.
- Press "CONTROL C"

You will see, FORMS FOUND: 1 ... PRESS CTRL - C TO CONTINUE

- Press "CONTROL C" to return to the PFS FUNCTION MENU.

5. PRINTING A LIST

CAUTION: TO PROCEED WITH THIS SECTION OF THE TUTORIAL YOU MUST BE USING A COMPUTER CONNECTED TO A PRINTER. DO NOT ATTEMPT TO PRINT LISTS/REPORTS WITHOUT A PRINTER ATTACHED AS THE COMPUTER WILL STOP FUNCTIONING.

Now that data is entered into our electronic file we may produce reports or lists which sort and select the data. PFS:FILE does not include a complete report generator. We do, however, have the ability to generate simple reports. For more complete report generation an additional program named PFS:REPORT may be purchased. PFS:REPORT requires a computer with two disk drives and a printer.

Let's create a report which lists the names of the programs entered, in alphabetical order (sort) for only those programs which will run on the Apple computer (select)...

From the PFS FUNCTION MENU select function 5:

- Press "5" key.
- Press "CONTROL C"

You will see the PRINT MENU. Select option 1 by

- Press "1" key.
- Press "CONTROL C"

You will see a blank form from your file MASTLIB. Notice at the bottom of the screen is the title RETRIEVE SPEC. Similar to retrieving a form for correction, we must tell the computer which forms we want. We must indicate that we only want those records which contain the word APPLE in the COMPUTER field. To do this,

- Press "RIGHT ARROW" five times bringing the cursor next to COMPUTER field.
- Type in 'APPLE' exactly.
- Press "CONTROL C"

You will see a PRINT OPTIONS screen. This tells the computer how to communicate with the computer and the format of the report.

- Press "RIGHT ARROW" two times bringing the cursor next to OUTPUT DEVICE (P/L).
- Type 'L' over the P. This tells the computer you are using a Printer.
- Press "RIGHT ARROW" one time bringing the cursor next to LINES PER PAGE:
- Type '01' over 66.
- Press "CONTROL C"

Once again you will see a blank form this time titled PRINT SPEC. This is how we tell the computer which items we wish to include in the report (select) and which items to place in alphabetical order (sort).

- Type "SX". This tells the computer to sort the name of each program, print the name of the program and advance the printer to the next line.
- Make sure printer is connected, paper is positioned and power is on.
- Press "CONTROL C"

The computer will now select the appropriate forms, sort them and print your report. Your report should look like the following;

```
PROGRAM NAME: CATALOG WRITER
PROGRAM NAME: MENDELIAN GENETICS
PROGRAM NAME: OPPOSITES
PROGRAM NAME: THE BERMUDA TRIANGLE
```

PROGRAM NAME: THE MATH MACHINE

- Press "**CONTROL C**" to return to the PFS FUNCTION MENU.

This completes the basic tutorial for PFS:FILE. You may wish to experiment with some of the functions of the program. Use the documentation where needed as you try the following:

1. Add a new listing to your file.
2. Remove a listing from the file.
3. Print a report of all files with cassette format.
4. Search and review (without printing) all files with elementary grade levels.
5. Print a report which lists all titles of software sorted by format.

SOFTWARE EVALUATION GUIDE

Documentation

	YES	NO	N/A
1. Documentation provides necessary assistance to make the program easy to use.	___	___	___
2. Documentation is well organized	___	___	___
3. Documentation is written in clear, straightforward language	___	___	___
4. Documentation comes with a good complete index	___	___	___
5. Other help is provided, eg. toll free number	___	___	___

Operation

1. The program runs at an acceptable speed	___	___	___
2. On-screen prompting (i.e. a help menu) is available	___	___	___
3. Input fields are well designed and self-prompting	___	___	___
4. The program recovers from malfunctions without losing data or text previously entered .	___	___	___

Output

1. The program provides for both screen and printer output	___	___	___
2. The program provides for output to a disk file ..	___	___	___
3. There is adequate flexibility in designing output	___	___	___
4. The output is formatted in an easy to read manner, using appropriate abbreviations, spacing and print	___	___	___

Overall

1. The program is easy to install	___	___	___
2. Backup copies of the program can be made or are provided	___	___	___
3. The program does the task it purports to do ...	___	___	___
4. The program provides for protection against casual access to confidential data	___	___	___
5. The program is integrated with other application programs	___	___	___
6. The program is flexible in meeting my needs ..	___	___	___

Overall evaluation

- ___ Excellent program. Recommended without hesitation.
- ___ Pretty good program. Consider purchase.
- ___ Fair. Might want to wait for something better.
- ___ Not useful. Do not recommend purchase.

HARDWARE EVALUATION GUIDE

MEMORY CAPACITY:

KEYBOARD:

- Numeric keypad
- Function keys
- Graphics
- Special Characters

DATA STORAGE:

- Data storage required
- Program storage required
- Access speed
- Reliability
- Backup capability
- Diskette capacity
- Reliability
- Serviceability
- Cost

PRINTER:

- Letter quality
- Dot matrix
 - Upper case only
 - Upper/lower case
 - Graphics
- 40/80 column formats
- Printing speed
- Print quality
- Multiple copies
- Multiple print qualities
- Reliability
- Serviceability
- Cost

OPERATING SYSTEMS:

- CP/M required
- APPLE DOS/PRODOS
- IBM format
- TRS 80 format
- Others

VENDORS:

- Experience
- Documentation quality
- Training availability
- Type of support availability

DATA BASE/FILE PLANNING DOCUMENT

Required - 3
Desired - 2
Not Needed - 1

DB/F CHARACTERISTICS

DB/F APPLICATION

ALPHANUMERIC FIELDS
COMMAND FILES
COMPUTED FIELDS
DATE FIELDS
FILE

FILE
COMPUTED FIELDS
DATE FIELDS
EDIT
FILE

FILE FORMAT
FILL FIELD

FIELD
HARD DISK
INTEGR

DISK
INTEGRATED
MENU DRAM

**MULTIPLE
NUMERIC**

NUMERIC
PAGES'S
PRIMA

PRIMARY
PRINTER
REC

RECOFF
REPO

REPORT
SECTION
SELF

SELF SING SO

§ 87(2)(b)

111

///

TOTAL

AVERAGE

141

142

SERN ID 1 1 4

Month Day Year

TOPIC 0 7 0 1

SERVICE 1 2 2

REQUESTER/HOST 8 0 0 0 1 1 9

WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
ADMINISTRATION: DATA BASES

OBJECTIVES: To develop an understanding of the differences between file handlers and data base management systems.
To develop an understanding of desired software characteristics unique to database management systems.
To develop an awareness of the need to specifically identify detailed features of a task.
To develop an understanding of critical factors to consider in selecting microcomputer hardware and software.

DIRECTIONS:

Complete the following by circling T for true or F false at the end of each statement.

1. Database systems allow you to use each piece of data more than once. T F
2. A file handling program can usually cross-reference or merge data from two files on a printout. T F
3. Sometimes data from several files can be combined on a database system. T F
4. A "field" is an item of information like "last name". T F
5. The database used in class was "Magic Data". T F
6. "Sorting" is a fast way to use the same data in different sequences. T F
7. Database programs are usually used for fast recalculation of alternative budgets or calculations. T F
8. File handling programs are usually easier to use than database systems. T F
9. Letters can be quickly written with database systems. T F
10. Most database systems can be immediately used without formal data processing experience and little training on the program. T F

SCORE

%

SERN ID 1 1 4

Month	Day	Year

TOPIC 0 7 0 1

SERVICE 1 2 2

REQUESTER/HOST 8 0 0 0 1 1 9

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- | | |
|---|-----|
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| 7. Database programs are usually used for fast recalculation of alternative budgets or calculations. | T F |
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| 9. Letters can be quickly written with database systems. | T F |
| 10. Most database systems can be immediately used without formal data processing experience and little training on the program. | T F |

SCORE

%

MICROADMIN PROJECT HOMEWORK:
DATABASES

DATABASE MODULE:

- 1) Select an information processing need in your office that could be assisted by a database program.
- 2) List as many types of data as possible to be collected in the central data file.
- 3) List the reports that could be generated from this data.
- 4) Why would the computer be more efficient to prepare these reports than present methods?

DATA BASES

DATABASES

PURPOSE(S): To develop an understanding of the differences between file handlers and database management systems.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
15 Min	Script pg. G-28 Describe features of each type of program. Introduce PFS and describe capabilities.	Listen and discuss	Handout features listing
30 Min	Using previous groups develop a sample database file using the PFS file handling program. Write field names and sizes on flipchart. Discuss as a total group general impressions of	Discussion	Flipchart

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	each group on ease of flexibility, and sequencing ability.		
15 min	Identify desired added capabilities. Relate to more sophisticated DBMS systems.	Listen and discuss	
30 min	Ask participants to add desired characteristics to handout. Fill in chart with examples from well-known systems. Discuss budget considerations vs. need for above software features.	Complete handout	Handout chart of partial DBMS features
	Script pg. G-29		

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
<u>TRANSITION:</u> It is important to specifically identify detailed features of a task to be computerized.			
30 min	Using consensus task identified in the introductory session, each group will identify three reports to be prepared. Each group will design sample headings and totals for each report and discuss questions.	Discussion	
<u>TRANSITION:</u> There are critical factors to consider in selecting microcomputer equipment and programs.			
30 min	Script pg. G-30 Discuss general characteristics of	Listen and discuss	

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	DBMS and integrated programs. Discuss software/hardware evaluation criteria. Discuss operating features of various microcomputer hardware configurations Discuss specific features of several well-known database and integrated programs.	Discussion Discussion	Handout criteria form Handout computer terms
<u>TRANSITION:</u> We're more than halfway through our scheduled content. Let's summarize and again touch base with you all.			

DATA BASES
A/V

SHEET

DATABASES
SCRIPT

DATABASE CHARACTERISTICS

GOAL: To develop an understanding of the differences between file handlers and database management systems.

Points to Cover/Script:

1. *Handout characteristics checklist.*
2. *Describe characteristics of each type of program.*
3. *Introduce PFS and describe capabilities.*
4. *Using previous 3 groups develop a sample database file using the PFS file handling program example.*
5. *Discuss as total group general impressions of each group (i.e. ease of formatting, ease of data entry, report flexibility, sequencing ability).*
6. *Identify desired added capabilities. Relate to more sophisticated database management systems.*

GOAL: To develop an understanding of desired software characteristics unique to database management systems.

Points to Cover/Script:

1. *Distribute database management systems handout of practical characteristics.*
2. *Ask participants to add desired characteristics to handout.*
3. *Fill in chart with examples from well-known systems.*
4. *Discuss budget considerations vs. need for above software features.*

TRANSITION: It is important to specifically identify detailed features of a task to be computerized.

GOAL: To develop an awareness of the need to specifically identify detailed features of a task.

Points to Cover/Script:

- 1. Use consensus task identified in the introductory session as the example used in the following activities.*
- 2. Identify 3 desired reports - sketch out sample headings and totals for 1 report.*
- 3. Ask participants what the data elements are that make up this report?*
- 4. Ask participants, where the information will come from? Who will retrieve it?*
- 5. From the items listed in No. 3, identify how many could there be? How often could they change, be added to, or deleted?*
- 6. Ask participants what data manipulation is necessary? (math, sequencing, selection, protection, graphic display, telecommunication).*
- 7. Ask participants how is this information currently organized and used?*
- 8. Ask participants if computerized, who would enter the information in the computer, how often, how entered (keyboard, scanner etc.)*
- 9. Identify the type of computer application program that will accomplish this task. (word processing, database, spread sheet, graphic, telecommunications, accounting package, custom program, etc.)*
- 10. Identify what else needs to be known before computerizing this task.*

TRANSITION: There are critical factors to consider in selecting microcomputer equipment and programs.

GOAL: To develop an understanding of critical factors to consider in selecting microcomputer hardware and software.

Points to Cover/Script:

- 1. Handout and discuss software/hardware evaluation form.*
- 2. Discuss general characteristics of database file, spreadsheet, word processing, and integrated programs.*
- 3. Discuss operating characteristics of various microcomputer hardware configurations.*
- 4. Distribute data processing vocabulary handout.*
- 5. Discuss specific characteristics of several well-known database file, spreadsheet, and word processing programs.*

TRANSITION: We're more than halfway through our scheduled content. Let's summarize and again touch base with you all.

SUMMARY
DAY 1

SUMMARY OF DAY 1

GOAL: To summarize the activities and content of the day, and debrief the experiences of the participants.

Points to Cover/Script:

1. *How does today's workshop fit together for you? (elicit responses)*

2. *(chart) What were some of the pluses for you today? (chart) What are some wishes you have left, regarding today's training? (chart)*

TRANSITION: Tomorrow we will go through two more modules, and spend the afternoon developing awareness trainings for your home staffs. Be thinking about how this information applies to your staff, how you will elicit interest in and support for implementing the trainings at your home sites. We will be starting at 8 a.m.

INTRODUCTION
DAY 2

INTRODUCTION TO DAY 2

GOAL: To bridge the activities of the previous day with the modules of today, and prepare participants to leave ready to deliver the training modules.

Points to Cover/Script:

1. *You have received an overview and three training modules. Today we will be covering Spread Sheets and Preprogrammed Administrative Applications: IEP.*
2. *Additionally, you will be given some ideas for returning to your site to implement trainings.*
3. *The majority of the afternoon will be spent on developing a brief awareness session for you to deliver to your home sites, to provide the basis for the modules.*
4. *The final activity is to evaluate the entire workshop, and for us to provide you with possibilities for follow-up.*
5. *Elicit any comments, concerns, questions, and respond to these.*

TRANSITION: The first module today is Spread Sheets.

MICROCOMPUTER SPREAD SHEET SYSTEMS
PARTICIPANT PACKET

1.

INTRODUCTION TO SPREAD SHEET WORKSHOP AGENDA

ACTIVITY	TIME

Introduction	10 min
Spread Sheet Tasks You Do	5 min
Magic Calc Hands On Tutorial	45 min
Tutorial Discussion	5 min
Needs Assessment and Software Selection	55 min
Closure and Evaluation	5 min

MAGICALC TUTORIAL

In the following tutorial we will use Magicalc to create a spread sheet model of a simple budget. The following conventions will be used:

- - Indicates each step in the tutorial where an action is required by the user.
- "/" - Anything in quotes refers to a key on the computer to be pressed by the user.
- REPRO - Anything underlined indicates something you will see on the computer screen.
- 'BUDGET' - Anything between apostrophes indicates something you will type into the computer. When typing the indicated word do not type the apostrophes.
- "TYPE" - Means to press the letter or character keys which follow.

1. BOOTING MAGICALC

- Place the Magicalc diskette into the disk drive with the label facing up.
- Close the disk drive door.
- Turn on the microcomputer.
- Wait (approximately 15 seconds) until you see the Magicalc copyright message.
- Press "RETURN"

You will see Magicalc System Menu. We will be using the CALCULATE SUBSYSTEM.

2. CREATING A SPREAD SHEET MODEL

- Press "1".

- Press the "DOWN ARROW" three times.

Note the cell marker moves to position A4. This is also indicated by A4 at the top left portion of the screen.

Immediately below A4 you will see 30. This indicates the amount of memory left in the computer. To the right of 30 is a blank bar which will be used to indicate command options. Below 30 is a flashing cursor. This is the command line or place where systems commands are entered. For example:

- Press "/.

Note that in the bar next to 30 a variety of letters indicating command options have appeared.

- Press "C".

You will see CLEAR: TYPE Y TO ERASE EVERYTHING in the command bar.

This is the command sequence used to erase the spread sheet and start over.

- Press "Y".

Notice that everything is erased and the cell marker returns to the A1 position as indicated by A1 at the top left of the screen.

Beneath the flashing cursor we see CA-. This indicates that the spread sheet is in the automatic recalculation mode.

We are now ready to create a budget model. We do this by entering information into specific cells of the worksheet. You may enter information into only one cell of the worksheet at a time. Information is entered into the cell displayed by the cell indicator. Information is entered by typing on the keyboard.

- Type the word 'BUDGT'. (Remember DO NOT type the Apostrophes)

As you type the word it will appear on the command line and simultaneously in the current cell. Note that we have spelled the word incorrectly.

- Press the "ESC" key.

The cursor backs up and erased the current character. Corrections are made in this fashion. On the Apple IIe, the "DELETE" key may be used with the same result.

- Type "ET".
- When the word is spelled correctly (BUDGET) press "RETURN"

We have just entered a label into cell A1. You may enter labels, values and formulas into spread sheet cells.

- Press "DOWN ARROW" two times.
- At location A3 type in 'ITEM'.
- Press "RETURN" (when word is spelled correctly).
- Press "RIGHT ARROW" one time.
- Type 'ALLOCATION'.
- Press "RETURN" (when word is spelled correctly).

Notice that only ALLOCAT appears in cell B3. We have more letters than will fit into the seven character width of the column. We will now change the width of the column to accommodate the word ALLOCATION.

- Press "/".
- Press "L".
- Type '11'.
- Press "RETURN".

Notice the actual width of the column has been changed to accommodate the entire word Allocation.

- Press "RIGHT ARROW" one time.
- Type 'BALANCE'.
- Press "RETURN".
- Press "/".
- Press "L".
- Type '8'.
- Press "RETURN".

- Press "RIGHT ARROW" 1 time.
- Type 'JULY'.
- Press "RIGHT ARROW" 1 time.

[Note: Moving the cell marker by pressing "ARROW" keys enters information into cells in the same way "RETURN" does.]

Notice the worksheet seems to move off the left of the screen. This is called scrolling. The worksheet is much larger than what is displayed on the monitor. The worksheet will scroll left, right, up and down to permit us to work on various sections. The entire worksheet is in the memory of the computer even though you can not see it on the monitor.

- Type 'AUGUST'.
- Press "RIGHT ARROW" 1 time.
- Type 'SEPT'.
- Press "DOWN ARROW" 2 times.
- Press "LEFT ARROW" 5 times.
- Type 'BOOKS'.
- Press "DOWN ARROW" 1 time.
- Type 'SUPPLIES'.
- Press "DOWN ARROW" 1 time.
- Type 'POSTAGE'.
- Press "DOWN ARROW" 1 time.
- Type 'NEW EQUIPMENT'.
- Press "DOWN ARROW" 1 time.
- Type 'MILEAGE'.
- Press "DOWN ARROW" 1 time.
- Type 'TRAVEL'.
- Press "DOWN ARROW" 1 time.
- Type 'WORD PROCESSING'.
- Press "DOWN ARROW" 2 times.
- Type 'TOTALS'.

You have completed entering labels for the budget spread sheet. The second column, ALLOCATION, represents the amount of money given in each budget category. You will now enter values for this column.

- Press 'RIGHT ARROW' one time.
- Press "UP ARROW" eight times.

Use the following values to fill in cells B5-B11 respectively. Do not type a '\$'. Use only numbers.

ITEM	ALLOCATION	
Books	456	(CELL B5)
Supplie	824	(CELL B6)
Postage	372	(CELL B7)
New Equ	430	(CELL B8)
Mileage	600.75	(CELL B9)
Travel	125	(CELL B10)
Word Pr	450	(CELL B11)

• Press "RETURN"

After entering these values, the cell marker should be at location B11 and your screen should look like this:

B11 V: 450

30

CA	!!	A	!!	B	!!	C	!!	D	!
1		BUDGET							
2									
3		ITEM		ALLOCATION		BALANCE		JULY	
4									
5		BOOKS		456					
6		SUPPLIE		824					
7		POSTAGE		372					
8		NEWEQU		430					
9		MILEAGE		600.75					
10		TRAVEL		125					
11		WORDPR		450					
12									
13		TOTALS							
14									
15									
16									
17									
18									
19									
20									

We will now enter a formula to total the allocations.

- Move the cell marker to location B13 by pressing the "Down Arrow" two times.
- Type '@SUM(B5.B11)' (note: you type 1 period, the computer prints 3.).
- Press "RETURN".

The total allocation is displayed in cell B13. The formula in cell B13 tells the spread sheet to add the numbers in cells B5 through B11 and display the results in B13.

We now need to create a formula which will display the balance for each line item in cell C5 through C11. This balance will be the total of each month's expenditure subtracted from the allocation for that item.

- Move the cell marker to cell C5 by pressing the "right arrow" once and the "up arrow" eight times.
- Type '+B5-@SUM(D5.F5)'.
- Press "RETURN".

This formula totals amounts placed in each month stored in cells D5 to F5, and subtracts this from the total allocation in location B5. The result is the balance as displayed in C5.

We now need to reproduce this formula throughout cells C6 through C11. We could type the formula six times, making appropriate changes for cell locations. The spread sheet program has a powerful command called REPRODUCE which allows us to copy across a range of cells.

- Press "/" key.
- Press "R".
- Hit "RETURN".
- Press "DOWN ARROW" one time.
- Press ".".
- Press "DOWN ARROW" six times.
- Press "RETURN".
- Press "R".
- Press "R".
- Press "R".

This process replicates the formula in cell C5 throughout cells C6 to C11 and changes the relative cells within the formula to be used in calculations. Notice each value in the balance column is exactly the same as the allocation column. This is a correct result as we have not entered values in the month columns.

We now need to total the balance column.

- Move cell marker to cell C13 by pressing "DOWN ARROW" 8 times.
- Type '@SUM(C5.C11)'.
- Press "RETURN".

This completes the creation of the spread sheet model.

3. ENTERING DATA

We may now enter VALUES into the various months representing expenditure of budget items.

- Move the cursor to cell D5 by pressing "RIGHT ARROW" one time and "UP ARROW" eight times.

Suppose you have spent \$135.00 on books in July.

- Type '135'.
- Press "RETURN".

Immediately, the balance for books has been reduced by the appropriate amount.

- Enter various amounts for each of the budget items for July, August and September. Note how the spread sheet recalculates values based on formulas.

This completes the tutorial for Magicalc. You may wish to experiment with some other functions of the Magicalc program such as: printing spread sheets, saving them to diskettes, loading saved models from diskettes, merging various models together, creating new formulas, etc. Use the documentation to try some of the following:

1. Add a new item to the budget list.
2. Compute the total expenditure for each month.
3. Compute the average monthly expenditures.
4. Change the width of column A to accommodate the length of the longest item listed.

4.
SPREAD SHEET NEEDS ASSESSMENT FORMS

MICROCOMPUTER SPREAD SHEET

A program which allows the user to create and store a mathematical model in the computer. Data may be entered and stored into this model which will automatically compute and display results. The program also allows creation of reports, based from the model, for printouts.

TERMS

Attributes - Providing for levels of access to specific or all cells

Blank - To erase a specific cell

Calculation - The order and process by which the program processes formula and values

Cell - The working unit of the spread sheet, the individual places where information is stored

Cursor - A movable marker which indicates which cell is being accessed

Deletion - To erase an entire row or column

Edit - To change the contents of a specific cell

Electronic Worksheet/Spread Sheet - A computer representation of a large work area divided into rows and columns accessed by a coordinate system

Format - To specify the justification or numeric layout for a specific cell or group of cells

Formula - A variety of numeric or logical manipulations supported by the spread sheet program mathematical functions

Insert - To add an entire row or column

Label - An alphanumerical (letter or number) value placed in a cell on the worksheet

Model - A mathematical representation of a function

Move - Ability of a program to move a column or row to another location

Reproduce/Replicate - To take the contents of a cell or group of cells and copy them to another location on the worksheet

Scroll - Movement of the window as the cursor changes location on the worksheet

Status - A fixed location on the video screen (usually top left) which indicates the current label, value, or formula of the cell currently accessed by the cursor

Width - Ability of a program to specify the size of a column

Window - The portion of text in the computers memory that is visible on the screen

Windowing - Ability of the program to move the window to view different areas of memory (different text)

Worksheet Window - What you see on the T.V. monitor which represents a portion of the entire worksheet/spread sheet

Value - A number placed into a cell

SPREAD SHEET PLANNING DOCUMENT

#2

Required - 3
Desired - 2
Not Needed - 1

S.S. CHARACTERISTICS

S.S. APPLICATION

VARIABLE COLUMN WIDTH
FUNCTIONS SUPPORTED
AUTOMATIC RECALCULATION
ORDER OF RECALCULATION
HORIZONTAL WINDOWING
FIXED TITLES
REPLICATION
PROTECTION
MOVE FUNCTION
LOGICAL ATTRIBUTES
SUFFICIENT OPERATIONS
SORTS
DATA ACCESSABILITY
LARGE REPORTS SUPPORTED
PRINTER SUPPORT
HARD DISK SUPPORT
TUTORIAL
CELL EDITING
ROW & COLUMN INSERTION
ROW & COLUMN DELETION

174

TOTAL

AVERAGE

173

174

SPREAD SHEET SOFTWARE EVALUATION FORM

VENDOR NAME: _____

VENDOR ADDRESS: _____

Vendor Phone: _____

Contact Person: _____

Software Name: _____

Hardware Name: _____

Memory Requirements: _____

Disk Drive Requirements: _____

Printers Supported: _____

Software Price: \$ _____

SPREAD SHEET CHARACTERISTIC REQUIRED (Y/N) FEATURES SUPPORTED (Y/N)

VARIABLE COLUMN WIDTH
 FUNCTIONS SUPPORTED
 AUTOMATIC RECALCULATION
 ORDER OF RECALCULATION
 HORIZONTAL WINDOWING
 VERTICAL WINDOWING
 FIXED TITLES
 REPLICATION
 PROTECTION ATRIBUTES
 MOVE FUNCTION
 LOGICAL OPERATIONS
 SUFFICIENT MEMORY
 SORTS
 DATA ACCESSABILITY
 LARGE REPORTS SUPPORTED
 PRINTER SUPPORT
 HARD DISK SUPPORT
 TUTORIAL
 CELL EDITING
 ROW & COLUMN INSERTION
 ROW & COLUMN DELETION

MICROADMIN PROJECT HOME WORK
SPREAD SHEET MODULE

On a sheet of paper sketch out a pread sheet model which would accomplish some task (budget, etc.) you would like to computerize.

Identify the following:

Labels

Values

Formulas

Cell relationships

needed in the spread sheet to accomplish your model.

List built in functions (average, sum, logical operations) which would facilitate your model.

SERN ID 114

Month	Day	Year

TOPIC 0701

SERVICE 122

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WORKSHOP-TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
ADMINISTRATION: SPREAD SHEETS

OBJECTIVE(S): To provide participants with an introductory experience with a spread sheet (Magicalc) and a process for the assessment of needs, evaluation and selection of spreadsheet software.

DIRECTIONS:

Complete the following by circling T for true or F for false at the end of each statement.

- | | | |
|----|---|-----|
| 1. | A spread sheet is a method of entering/displaying information within rows and columns. | T F |
| 2. | Spread sheets are programs with rows and columns for data handling. | T F |
| 3. | Spread sheets usually come with formulas built into the software. | T F |
| 4. | Budgets are easy to keep on spread sheets. | T F |
| 5. | Inventory may be done on a spread sheet. | T F |
| 6. | Two kinds of data may be entered on spread sheets: value and character. | T F |
| 7. | In purchasing spread sheet software the following are characteristics you would consider: | |
| | variable column width | T F |
| | horizontal windowing | T F |
| | automatic recalculation | T F |
| | replication | T F |

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REQUESTER/HOST 8 0 0 0 1 1 9

WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
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| | replication | T F |

MICROCOMPUTER SPREAD SHEET SYSTEMS

SPREADSHEETS

PURPOSE(S): To provide staff developers with a spread sheet workshop they can deliver to special education administrators.

GOAL: Participants will be exposed to and practice spread sheet concepts, needs assessment and software evaluation, focusing on administrative applications.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	Script pg. J-27		
10 Min	Agenda/Goal/Negotiations	Listen and discuss	Agenda/Goal Charts
10 Min	Explain that spread sheets are used to create models which do operations on numbers. Budgets are an example of something we may wish to model and "do" on a spread sheet. In addition, the spread sheet lets us play "what if" with the model. (As time allows you may want to demonstrate a "model" showing how it is		

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	created using "rows" and "columns" which may include numbers, formulas and labels). Elicit Spread Sheet Tasks. It explains importance of understanding what you expect spread sheet to do for you Script pg. J-28	List tasks	Charts
<u>Transition:</u> Now that you have identified some tasks you would like to do with a spread sheet, lets take a look at Magicalc on the Apple computer as an example of a spread sheet program.			
45 Min	Magicalc SPREAD SHEET Tutorial, Reviews Tutorial Conventions, Reviews Apple Keyboard	Hands On Activity 2 or 3 participants to each computer 181	Tutorial, Apple II Magicalc Disks

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
5 Min	Tutorial debriefing Ask how they felt about spread sheet and Magicalc in particular	Discuss how they liked/disliked spread sheet	Chart
Transition: As you can see using a spread sheet is fun and can save you a lot of work. The key this is in selecting a system which matches your needs.			
10 Min	Introduce Needs Assessment Systems and Forms. Explain that #1 is a list of characteristics which may be found in spread sheet programs #2 is a planning guide which will let us match a particular task needs to spread sheet characteristics #3 transfers those characteristics we must have in a spread sheet	Listen and review	Charts, 3 forms; #1 Micro spread sheet #2 SPREAD SHEET Plan. Doc #3 Software Eval

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	program to a software evaluation form to be used when buying spread sheet software. Script pg. J-29		
<u>Transition:</u> We need to take a little time to examine some of the main characteristics we will need in a spread sheet program if we are to be successful in accomplishing our tasks.			
25 Min	Using #2 go through each characteristic, explain and give examples Ask participants questions as you explain to verify their understanding of the characteristics Script pg. J-30	Listen Respond	Form #2, Charts

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
Transition: Lets see if we can put into practice what we have experienced today.			
15 Min	Software Evaluation Using list of tasks generated by group, identify one and go through each characteristic to see if it is needed to accomplish that task. Using Magicalc as a model, evaluate it against this list of needed characteristics.	Discussion	Charts, Lists
Transition: Thank you for your attention and participation and we hope you feel more confident in your ability to select and use spread sheet software.			

MICROCOMPUTER SPREAD SHEET SYSTEMS

AV SHEET

AV SHEET

List of Materials (attached by number)

1. Agenda
2. Magicalc Disk and documentation- one for each computer or right to multiply boot
3. Magicalc Tutorial
4. Spread Sheet Needs Assessment Forms
 - #1. microcomputer Spread Sheet
 - #2. Spread Sheet Planning Document
 - #3. Spread Sheet Software Evaluation Form

Equipment

1. Apple II and monitor or equivalent (2 participants per machine)
2. Optional large monitor to display sample spread sheet models
3. Chart rack, overhead, board or equivalent
4. Colored pens, etc.
5. Tape

MICROCOMPUTER SPREAD SHEET SYSTEMS
SCRIPT

INTRODUCTION TO SPREAD SHEET

GOAL: To Provide participants with

- a. an introductory experience with a spread sheet (Magicalc),
- b. a process for the assessment of needs, evaluation and selection of spread sheet software.

Points to Cover/Script:

1. *Discuss the agenda. Go over the major activities and time allotments. Ask if this meets the expectations of the group. If there are unmet expectations, discuss them. If it is possible, include activities or information which the group desires. Be flexible. Have the group introduce itself and indicate prior experience if any, with Spread Sheet.*

2. *Explain what a spread sheet is: method of generating a model of some real world function like a budget. The model is generated within rows and columns within which you may place numbers formulas and labels. If possible (using a large monitor set up) display a spread sheet program, show the rows and columns. Set up a simple model demonstrating how the spread sheet works. An example might be a simple check book situation and the model might look like this:*

	amount	balance
check #1	100.00	234.00
check #2	34.00	200.00

The balance column would be computed by formula, the check amounts are numbers and the others represent labels. Demonstrate the "what if" capabilities by changing the amounts and showing how the computations are automatically performed by the program.

3. *Using the chart to keep record, ask the group to generate a list of tasks (things they do in their work) on which they think they could use Spread Sheet (it doesn't matter if the activities are appropriate to Spread Sheet). Post this list on the wall as you will use it later.*

TRANSITION: Now that you have identified some tasks you would like to do with Spread Sheet, lets take a look at Magicalc on the Apple computer as an example of a spread sheet program.

4. Refer to the Magicalc Tutorial in the participant packet. Review how to handle disks, (not to bend, place on t.v., etc., do not touch the open area). Show how to place disk in computer drive (open door, hold disk with label up, insert disk, close door). Review the Apple keyboard (control key, esc key, arrow keys, delete key, open apple keys, difference between right arrow and space bar, use of #1 not "1"). Demonstrate how to turn on computer and monitors. Review page one of Tutorial (go over the conventions:

- - step in the tutorial where user action required

"/" a key on the computer to be pressed

Magicalc underlined means something on the screen

'Line Item' things inside of the apostrophes mean to type that on the screen NOT including the apostrophes (' ')

Be available during the tutorial to help those who lose track of the sequence of events and to answer questions. If participants follow ALL steps and directions in the Tutorial, they will be successful.

The tutorial including the above directions should be complete within a 45 min. time frame. Not all participants will finish all the activities. Let them know that it is o.k. and there may be time later for them to do any activity that they didn't complete.

5. After completing the tutorial have the group discuss the experience. Focus on their likes and dislikes of the program. You may write these up on a chart if appropriate.

TRANSITION: As you can see using a spread sheet is fun and can save you a lot of work. The key to this is selecting a system which matches your needs.

6. Pass out the Needs Assessment forms (#1-#3). Tell the participants that form #1 is a listing of characteristics common to Spread Sheet programs. Tell them that using these characteristics as a base, you will teach them a process for matching their needs to Spread Sheet software enabling them to make good software selections.

Tell them to look at form #2 (planning document). Explain that a list

of three or four tasks to be computerized (Spread Sheet) should be listed down the left side of the page (these should be the priority tasks for this application). Each characteristic of word processing is listed across the top. For each task you will determine if the characteristic is required, desired, or not needed. A 3, 2, or 1 is place respectively in the corresponding space.

After filling in the spaces for all tasks add up the numbers and average.

Example:

	individual column width<----	characteristic
budgets	2	
student grades	3	
inventory	1	

total	6	
average	2 <----	total 6 / 3 tasks = 2)

This then indicates that the characteristic of "individual column width" is desirable but not absolutely needed in the user's selection of Spread Sheet.

TRANSITION: We need to take a little time to examine some of the main characteristics we will need in a spread sheet program if we are to be successful in accomplishing our tasks.

7. Using the planning guide, go through each characteristic and explain it to the participants using suitable examples.

8. Explain that the software evaluation form takes the information computed on the Planning document and is used to look at one piece of software at a time. The participant having done the full analysis would take the software evaluation form with them to a vendor and tell the salesperson to show them a system that had the indicated characteristics (which the participant must have to do his priority tasks).

TRANSITION: Let's see if we can put into practice what we have experienced today.

9. Go back to the list of tasks the group generated and have the participants choose 2 or 3 items to "run" through the process. Fill out a form on a chart rack for those two items and then ask the group to determine if Magicalc would be a suitable selection. Have the group use the software documentation to find software characteristics they may be unaware of. Discuss their findings.

TRANSITION: Thank you for your attention and participation and we hope you feel more confident in your ability to select and use spread sheet software.

10. Bring the session to a close by reviewing the steps for selecting Spread Sheet software:

- A. understand very clearly what you want the computer to do*
- B. break these tasks down into characteristics*
- C. look at software which has the needed characteristics*
- D. buy only after you preview based on your needs and analysis*

11. Session Evaluation

PREPROGRAMMED ADMINISTRATIVE
APPLICATIONS
PARTICIPANT PACKET

COMPUTER GUIDED TOUR

ACTIVITY: Take a guided tour of an IEP program on the computer.
YOU WILL SEE:

1. The steps involved
2. The way data is kept
3. The planning, managing, and reporting capability of the software
4. How information is updated
5. How different reports can be generated from the same database

Gently insert the disk labeled "Management Software Demonstration" into the disk drive and close the door. Now turn on your Apple computer. This is the Apple version, The IBM version is very similar.

[**NOTE-The numbers refer to the sequence of screens you will see. The < and > tell you what to press on the computer.]

1. When the screen comes on with "try me" then <press any key>.
2. Take time to read the screen about capabilities then <press any key>.
3. When you see the learning tools main menu, take time to read the items. We will first be looking at the Individual Planning System (IPS) <press "I">.
4. Read this screen to find out about creating, planning, and managing information. For more information <press "M">.
5. Read about IPS planner, manager, and report. These are the programs within the IPS. Manager sets up the templates and customizes the system. Planner is used for the daily running of the information such as editing and printing reports. Report creates report formats. When you are ready, <press "M">.

6. Now it is time to try out a sample look at the menu of capabilities. You will complete the same steps as if you were actually using the program. <press "V" to view>.

7. To get a file on an individual you would type in their name. We will look at the screen then follow the instructions in the square in the lower right. <Hit return>.

8. This is a menu of major sections in each record. There will be subsections and information under each category. You could also create more or different sections if you like. There are sections, subsections, and data that are hierarchically arranged. To move around the menu you will hit "j" for jump. Follow the instructions and then <press "s" to see>.

9. These are subsections under the individual information section. You could have any subsections that you want under your categories. <Press s> to see more under that category.

10. Now we see the actual data fields with a particular student entered. Notice the fields of data showing the type of information kept. You could have any information kept. You could have any information you want, as many fields and types as you need.

Now follow the instructions in your lighted square. <press "J" to jump> until you are at "home town".

11. We will update the item. <press "E" to edit>.

12. The screen shows you that there is a menu or list of home towns. This is one easy way of having users enter information. This works well if there are a limited number (15 or so) of choices that may be used. It would not work where you have a wide number of choices, such as street names. To choose a new home town <press "A" and return>.

13. Now we will edit another bit of information that may be incorrect. Follow the instructions in the lighted square. <press "J" 6 times then "D" for details>.

14. <press "E" for edit>. We see another menu used for the various languages. <press "S" for Spanish>. The data will be changed.

15. Let's look at a category that needs special information. Certainly not all of our information is going to be short items or fit on menus. <press "J"> <press "E">.

16. This data item, which contains emergency information, is written in extended text. This type of data field allows for sentences or paragraphs. It is important to be able to enter this type of explanatory information when needed. When you are ready to continue, <press "T">.

17. Now let's look at another section of the record, the instructional program. <press "J"> 3 times to jump. <press "E"> to see.

18. These are the subsections under the instructional program. You would probably have more areas. To see more about math <press "J"> while the cursor is on math.

19. Under the category of math in the instructional program section, you see the actual math goals and objectives for Elena. These may be typed in, or pulled from the curriculum disks that are available for this program. <press "M">.

20. This screen shows a sample of a custom report. You are of course interested in an IEP. It's important to know you can have that IEP in any format that you want. Most schools start out putting the reports in the same format that they are currently using so everyone will be comfortable with it. Later they may change the format of the printed report. You can easily have many types of reports and formats (one for the locals, another for the state, a third for the feds) and you never have to change the database. <press "M">.

21. This is a status or progress report for the review process. It is another example of a custom report. It sorts out and lists the exact data you need on each of the students and prints it out in table form, in whatever order. For example, you might want different information for administrative purposes. You might need to know about the students using transportation or speech and language services, etc. When you are ready, <press "M">.

22. These are some important considerations for IEP and administrative software:

1. You can customize the system to your needs.

2. You can expand it later without starting over.
 3. The screens and commands are written in plain English and it's easy for folks to learn to use.
 4. It can provide many different types of reports in formats you want.
 5. You can add on to a large database of goals, objectives, and resources in all of the curriculum areas.
 6. You can browse the file for information or goal setting.
 7. You can transfer information from the local site to a central computer.
- <press the escape key - "esc">

MANAGEMENT OF CURRICULUM AREAS

ACTIVITY: A self-paced tour on the computer through curriculum management.

One of the major reasons for the IEP is to assure that each child is receiving an educational program appropriate to his or her needs. Along with the services, the goals and objectives specify this type of program.

One of the main uses of IEP software is the quick choosing and/or updating of appropriate goals and objectives.

Hopefully this also provides some continuity within the program for each child and consistency between schools within the system.

This section of the program provides you with the ability to generate or choose goals, objectives, methods, materials, lesson plans, tests, or other evaluations for each child in each of his or her curriculum areas.

In this program from Learning Tools an important feature is the ability to tap into a large database called CMS Network. They have 16 disks of goals and objectives in every area which are already done and are available for \$5.00 per disk. You may then copy these disks for each site that wants them. This may function as the core of your goals and objectives. You may then add as many more as you want. This saves perhaps thousands of hours of work and gets the system up to speed quickly.

1. To learn more, make sure you are at the main menu and <press "C">. Read the next screen.
2. Now <press "M"> and continue the guided tour on your own. Follow the instructions on the screen.
3. After you finish the CMS guided tour you may want to go through the administrative planning component. If so <press "A"> when you return to the main menu.

SOFTWARE CONSIDERATIONS

Consider the following points about software selection. Do this in your head first then make notes in pencil.

CAUTION: There is no need to come up with all of the answers now. That would very likely lead to a premature, insufficient set of choices. This is best done as a group process. You may want to read the following reprints as well:

1. Selecting Microcomputer Systems for the School
2. Questions About Administrative Software
3. Data Bases and Special Education IEP Reports
4. Microcomputer Planning Guide

QUESTIONS TO ASK YOURSELF AND OTHERS

1. Based on the previous activities in this section, rank your needs and wants with regard to computer application for IEPs and administration. You may want to look over the duties of your teachers and staff as well. What tasks take the greatest amount of time and money that a computer could be doing?
2. How many students, teachers and schools would ultimately be on the system when it is fully operational?
3. Would you want to use a microcomputer at the school site but also store data on a central computer for administrative purposes?
4. Do you have computers at the schools now? If so, what kind?
5. Were you planning to purchase more for administrative functions?
6. What funds or other resources do you have available now or will you have over the next year to support this project?
7. Do you have a person who has some background in computers and can talk supportively to people who will be assigned to oversee the implementation of the project? What will the cost of that person's time be?

8. Will teachers and other staff be using the system? If so get a program that is easy to use so you don't have to spend a lot of time and money on training. Hopefully other staff time will be saved, once the system is in place, because the process is computerized.

About Software:

1. Do you want a particular format for your IEP or would a generic one on the program be O.K.? Do you want to customize the format?

2. How can you be assured that the goals and objectives the program generates will be sufficient for each child? Does the teacher pick the goals? Can you easily add to the goals, either for one child or for your whole bank of goals?

3. Would you like to do more than just an IEP? If so, can the program generate other reports etc., also?

4. How flexible is the program? Can you change fields or data items easily even after the system is all set up and running? Will it hold enough data fields for your needs? On how many fields will it search and sort? How many student records can the system hold and work with on a 1 or 2 disk drive system? Can you use a variety of different data types, such as word, code, numeric, menu, and extended text?

5. On what computers will the system run?

6. What is the cost of all the software you will need?

- (A) for one school
- (B) for several schools (discount for multiple copies?)
- (C) for a centralized system

7. Are there hidden costs? Is there some built in mechanism that makes you dependent on the software company for expensive help or user fees?

8. Is there any mechanism for customer support, such as a telephone hotline?

9. How many students can this software and hardware realistically handle?
10. How easy is it to use? Is there on screen help or prompts for what you need to do? Does it use plain English? Are there tutorial disks and exercises or example cases in the documentation?
11. Look at the documentation. How easy is it to follow? Does it have step-by-step instructions as well as examples and diagrams? Does it use plain English or technical jargon? Does it have a good index?
12. Flexibility and ease of use interact sometimes. A simple but inflexible program will soon be frustrating for the things it won't do. A complex program can be implemented by a novice if the steps to implementation are well documented. A complex program without step-by-step instructions can be a horror because only a sophisticated computer person can manage it.
13. Are there levels of use so that the average teacher or staff person can use it quickly without much training while a manager who might have more expertise could do more with the system and have more skill with it?
14. Do you think it is worth the costs? It is good to think of this as an investment. Obviously it will take some work in the beginning so you must look for the payoff down the road. You only set up the template once. You only enter a child's information once. Thereafter, you change only the information you need to change. It becomes faster, more efficient and versatile the more you use it.
15. Do you know of others who are using the software under consideration? Talk to these people, and if possible, visit them and see how easy and quick it is and how the reports can be formatted.

PITFALLS

OR HOW NOT TO LEARN THE HARD WAY

To avoid pitfalls in choosing and implementing administrative or IEP software:

1. Plan thoroughly so that you know what you want to do, not only now but in the future. Then invest in a system that can meet your needs now and be expanded to meet future needs later.
2. Allow adequate time and personnel to accomplish the job. It will pay off in the long run.
3. Get sufficient input from those who will need to use it so the programs will ultimately meet their needs.
4. Get agreements from all those involved about tasks, responsibilities, and timelines. There is a tremendous interdependency here. If one person doesn't do his job it can cause delays that may ruin the efficacy of the whole system.
5. Check out the companies involved. Do they have a good track record and many users? Do they have reasonable guarantees? Do they have a hotline for help when you need it?
6. Try before you buy. Never buy a program that you have not tried or seen before in some way, at least on a demo disk.

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WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
 ADMINISTRATION: PREPROGRAMMED
 ADMINISTRATIVE APPLICATIONS

OBJECTIVE(S):

To become familiar with the major uses of IEP software and its value if applied to their school.

To see what this process is like on a computer with a simulation of the program.

To see what other helps are available for teachers and administrators for both curriculum development and resource management.

To assist the participant in beginning to identify the needs of their school or LEA and determine the features they should look for in an IEP program.

To avoid pitfalls in choosing and implementing administrative or IEP software.

To practice applying this model to the system at the participant's home site and identify what types of changes should be made.

DIRECTIONS:

Complete the following by circling T for true or F for false at the end of each statement.

1. Preprogrammed IEP software can help teachers and IEP committees locate goals, objectives and resource information quickly. T F
2. Administrative software if good, can assist in transportation, grades, testing and review, and referrals. T F
3. Custom reports are difficult to achieve. Most administrative software has only one report format. T F
4. The software we used in the module by Learning Tools, is limited to developing IEPs. T F
5. When selecting administrative software, an important consideration is:

screens and commands are written in plain English	T	F
calculation of totals	T	F
ability to add on to a large data base of goals, objectives and resources	T	F
6. The CMS Network is a large database. T F
7. Any software and hardware system can handle all students at a site or in a given program. T F
8. Invest in any system now. There is no problem in replacing it in the future. T F

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Month	Day	Year

TOPIC 0 7 0 1

SERVICE 1 2 2

REQUESTER/HOST 8 0 0 0 1 1 9

WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
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MICROADMIN HOMEWORK
PREPROGRAMMED ADMINISTRATIVE APPLICATIONS: IEP

Now that you have become acquainted with some administrative uses of software let's try to see how and where it may apply to your needs.

First, read the articles:

Databases and Special Education IEP Reports
Selecting Microcomputer Systems for School Administration

Second, using the form "Questions About Administrative Software," go through each of the items and rank their importance to your needs and your situation. If an item is of utmost importance score it a 5; if it is of very little importance score it a 1; if it is of no importance, score it a 0. Within each major area put a star (*) by the one you think is most important.

List your 6 most important considerations.

As time permits ask a colleague to do the same thing and check your differences.

What did you find out?

This, plus the information on the Microcomputer Planning Document, should give you some ideas of the direction to proceed.

Send your responses to the instructor if you are taking this training for credit.

PREPROGRAMMED ADMINISTRATIVE
APPLICATIONS: IEP

ADDITIONAL HANDOUTS

- and accept any other type of information you choose in the order you specify?

- *****

- *****

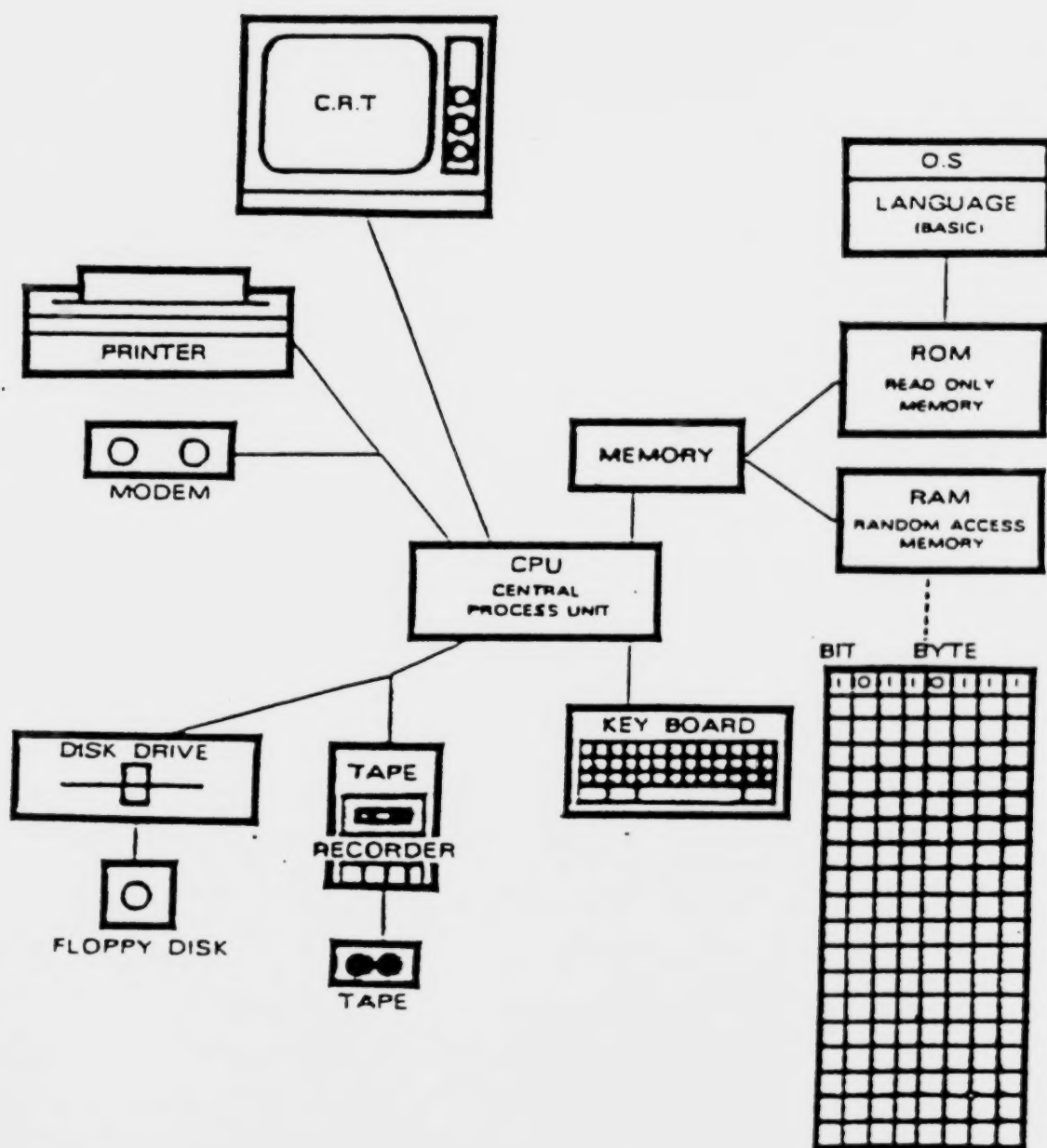
COST:

28. Are there discounts for multiple copies?
29. Are prices fixed, without hidden costs?
30. Can you get reasonable customer support without charge?
31. Are new versions of the software (with bugs fixed and new features added) available free or at a nominal fee?
32. Can you generate reports without paying a usage fee?

[illegible]

MICROCOMPUTER PLANNING GUIDE

"THE MICROCOMPUTER"



THE ADMINISTRATOR'S NOTEBOOK DATA BASES AND SPECIAL EDUCATION IEP REPORTS

How a data base can store, sort, and report information quickly.

By David S. Honeyman

David S. Honeyman, Ph.D., is an assistant professor in the Department of Administration and Foundations at Kansas State University.

As every special education administrator and teacher knows, special education requires a lot of paperwork. The Education for All Handicapped Children Act of 1975 (P.L. 94-142) requires that an individual education program (IEP) be developed for each child receiving special education.

IEPs are formidable documents. They include basic demographic data, descriptions of the special education program and other related services, as well as a detailed description of the goals and objectives a teacher has selected for each child. These forms are constantly updated and all children are reevaluated on a regular basis.

While reporting and record keeping requirements for special education students are mandated by the Act, each school district is free to design its own system. Some special education administrators are turning to the microcomputer for help. A project currently under development with several school districts and the Special Education Section of the Kansas State Department of Education demonstrates how a simple data base filing system can ease this paperwork burden.

A typical IEP report. An example of a typical report based on an IEP demonstrates what a detailed job special education record-keeping can be. The Unduplicated Head-Count reports information on all special education children, identifying children by age and handicapping condition for each of eight instructional situations (self-contained classroom, for example).

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To get a better hold on all this storing and reporting of information, we turned to a data base management program, PFS File (Software Publishing Company, San Jose, CA). PFS File is most easily thought of as a file management system. The screen presents the user with a file "page" within which each record is kept. Within that file are "fields," headings under which information can be filed. For example, our PFS file for the IEP form contains the fields Student Name, Grade Level, Handicap Condition, Program Placement, and Referral Date, among others. As we shall see, however, the beauty of a data base program--even a relatively simple and limited file management program like PFS File--is its ability to sort and list information by fields.

Designing the files. To design a special education file management system, we started at the end--the reports we wished the data to generate. The file must contain fields that cover the data need of all potential outputs (reports). If such needs are lengthy and involved, a coding system can be used to reduce the number of characters needed for any field. By reviewing the scope and sequence of the reports generated, a data dictionary can be developed that will help explain the codes and abbreviations used in the file.

For the IEP data base--represented here with fictitious data--we identified each potential field, noting such characteristics as field length and alphanumeric structure. This analysis resulted in the use of a multipage file. Page one contained all demographic and descriptive information including a special field Age as of Date. We needed this field for the age requirement of the unduplicated head count. (PFS File will not allow the user to calculate an age from date of birth without using a decimal analog or the Gregorian calendar format.) Subsequent pages of the IEP are allocated according to the number of "Long Term Goals" needed for each child. (See Figure 1.)

The coding system used to describe handicap condition, program placement, related services, goals, and objectives is described in a data dictionary developed during the analysis of data requirements. For example, the Head-Count Report, a table generated from our sample files, contains four columns of information: Age, Student Name, Handicap, and Delivery Type (instructional situation). (See figure 2.)

A range of reports. But from this same file of data other reports can be generated to comply with regulations. Separate reports can be generated by delivery type code, so that officials can see how many students are receiving instruction in a separate classroom, for instance. (See Figure 3.)

Given the file arrangement, it is possible to generate other required reports. For example, by sorting for different fields, the following tables or reports can also be generated:

- **Evaluation Summary** lists the evaluation dates for goals or objectives for each student;
- **Goal Summary** summarizes the long range goals for each student;
- **Summary Report** notes the program placement and time in Special education programs for each child.

While other specialized IEP software is available to record and track special education students' progress, data base and file management programs offer a genuine alternative. (For a sampling of IEP software, see *Electronic Learning*, February 1984, pp. 41-42.). Though file managers don't offer as many features or as much storage as specialized IEP packages, data base files, designed with specific reports in mind can help the special education administrator get a handle on the data--without breaking the budget.

THE ADMINISTRATOR'S NOTEBOOK (Continued)

SAMPLE DATA BASE FORM: IEP FILE

STUDENT NAME: Terrence, William
 DATE OF BIRTH: 74/02/17
 GRADE LEVEL: 04
 PROGRAM PLACEMENT: 105
 REFERRAL DATE: INITIATION DATE:
 TIME IN SPEC. PROG. (MIN./WEEK):
 RELATED SERVICES 1.:
 2.:
 3.:
 4.:
 CURRENT LEVEL OF FUNCTION 1.:
 2.:
 3.:
 4.:
 IEP SIGNED (Y/N):
 LONG TERM GOAL #1:
 SHORT TERM OBJ. #1A: START DATE: EVAL. DATE:

These were corrected

Figure 1

SAMPLE DATA BASE REPORT: HEAD-COUNT SUMMARY

Age	Name	Handicap	Delivery Type
10	Anderson, Darryl	05	105
11	Jones, John	05	104
11	Terrence, William	05	105
12	Shaffer, Danielle	05	103
13	Johnson, Carolyn	05	106
10	Warren, James	05	105
14	Ray, Debbie	05	105

COUNT: 7

Figure 2

SAMPLE REPORT: HEAD-COUNT SORTED BY DELIVERY CODE

HEAD-COUNT REPORT (CODE 103)			
Age	Name	Handicap	Delivery Type
12	Shaffer, Danielle	05	103

COUNT: 1

HEAD-COUNT REPORT (CODE 104)			
Age	Name	Handicap	Delivery Type
11	Jones, John	05	104

COUNT: 1

HEAD-COUNT REPORT (CODE 105)			
Age	Name	Handicap	Delivery Type
10	Anderson, Darryl	05	105
11	Terrence, William	05	105
10	Warren, James	05	105
14	Ray, Debbie	05	105

COUNT: 4

Figure 3

INTRODUCTION

As educators and administrators who have championed the microcomputer since its arrival in the schools, we have often been asked questions like:

- Is there an attendance program that I can run on my Apple?
- Can I do scheduling on one of my district's TRS-80's?
- Is there some way that I can do fund accounting on a microcomputer?

We would answer as best we could, but we were often frustrated by the lack of available data about "what's out there" for school administrators. Therefore, we decided to assemble the data ourselves and make it available to school administrators throughout the country.

To gather relevant information for our first edition, we mailed questionnaires to over 300 software vendors. Of the many responses we received, about sixty vendors described one or more programs which we felt would be of interest to administrators. We excluded many other programs because they were essentially curricular in nature or because they were office automation programs about which ample information was already available. For this second revised edition, we sent questionnaires to an additional 100 vendors and found another forty whose products merited inclusion.

Readers of this edition will find 190 new programs, plus many new versions of software listed in the first edition. Not surprisingly, owners of IBM PCs will find they have a much wider selection of software than they had a year ago. But those with Apple, Radio Shack and other computers will also find many new possibilities for automation of their operations.

Also new to this edition are introductory articles on office automation software and on the promising new programs called "integrated software." New indexes will help readers find the software corresponding to the functions they want to automate or to the hardware already available in their districts.

The year ahead will see further changes as new software is developed or adapted for Apple's MacIntosh, IBM's PC/AT and other

new microcomputers. We are also likely to see more and more integrated packages designed to automate virtually all of the administrative functions of schools and districts. Whatever the changes, we will monitor them closely and report them in the 1985-86 edition of *Micros For Managers*.

The New Jersey School Boards Association is unable to test every product listed in this manual. All data, claims, and printouts have been provided by the manufacturers or vendors of these items.

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SELECTING MICROCOMPUTER SYSTEMS FOR SCHOOL ADMINISTRATION

By Dr. Chase W. Crawford, Florida Department of Education and
Dr. Philip E. Mackey, New Jersey School Boards Association

Educational administrators are trying to survive and thrive with the latest sensation of the computer age--the microcomputer. Earlier generations of these electronic marvels were appropriate only for instructional use; this was primarily because of their small capacity for the storage of data. But some microcomputers now available possess the storage capacity of many older, full-size computers. In addition, they are easier to use and more affordable than ever before. Thus, microcomputers now have the potential to provide enormous assistance to school administrators.

In brief, there are three basic steps you should follow in deciding what microcomputer system to purchase for administrative purposes. First, decide what administrative functions should be automated and in what order of priority. Then, identify the microcomputer software that best automates these functions. Finally, select the hardware that runs the selected software.

Determining What Functions to Automate

There are three factors which could undermine the success of your automation efforts, so your first thoughts should be how to overcome them. They are costs, computerphobia and security problems.

The primary reason to automate any function is because it will allow you to perform the activity less expensively or more efficiently. But some activities cost more to automate than the benefits which they yield are worth. You should do a cost/benefit analysis of each function to make sure that automation will produce efficiency or quality sufficient to justify the initial and continuing costs in dollars and in staff time.

Computerphobia is caused by lack of knowledge and you cannot hope to automate successfully unless you and the staff members who will

use computers are informed on the subject. While there is much to know, there are many excellent sources of information, so if you and your staff need it, you should read some books and articles and attend a seminar or course which offers hands-on experience.

Security problems are bound to arise when you remove files from a locked drawer and enter them into a microcomputer. But you and your staff will be relieved to know that password systems can restrict access to those who need to know or to manipulate important data. Another sort of security problem is the chaos which would prevail if the disks containing your vital records were destroyed or accidentally erased. Computer files are actually safer than hard copy files, however, if you institute proper back-up procedures. Electronic files are easy to copy and you should make sure there are always duplicates of your important records.

As you analyze your administrative functions to determine what should be automated, don't fall into the trap of assuming that computer systems solve problems. They do not; they perform functions. These functions may be part of the solution, but the overall solution also includes functions performed manually and, possibly, by other equipment. The way in which a salesperson approaches you as a customer is very important. Avoid a sales person who tries to sell you computers; choose one who tries to sell you functions. There is a subtle, but vital distinction between treating a computer as the solution and regarding it as a tool which humans use to solve problems.

The best way to choose functions to automate is to list all the tasks your office now performs, plus other activities you would like to perform. Then isolate those functions which process massive amounts of data through well-defined operations, involve highly repetitive processing, require great speed of processing or are not practicable by manual or other means. Functions with one or more of these characteristics are good bets for automation, but only you can decide which are the most important for your office, school or district.

Once you have determined your immediate priorities for automation, shift your focus to future years and consider what functions you will want to add after your initial success. Don't make the mistake of purchasing a microcomputer this year that lacks the capacity to do next year's additional functions.

Identifying the Right Software

There are two kinds of microcomputer software with the functions you have selected. There is specific software which is expressly designed to accomplish one or more functions of educational administration. This book is a consumer's guide to such software and contains vital information about most of the commercially-available programs at the time of its publication. But there is also software with general applicability which can automate some of the administrative functions in your district. Dr. Joseph R. Little's article, which follows in this book, offers information and advice about his office-automation software. You owe it to yourself and to your district to investigate this more general software before you spend hundreds or thousands of dollars on specific programs. This is true because office-automation software is cost-effective (in the sense that one program can be adapted to perform a variety of functions), flexible, generally free of defects and readily available from local retailers. However, general application software requires more time and knowledge on your part because you or your staff will have to design and maintain the specific systems you require. After you peruse this book, you should know which way you want to go.

If you decide to go the route of specific software, study the programs described in this book carefully, identify those which seem to promise what you want, and then start doing some detective work. Read any reviews cited to see what impartial experts think about the products. Call current users and ask how they like the software (if no users are listed in this book, call the vendor and ask for the information). Call the vendor and get details about the programs. As you gather information, try to answer these general questions:

Will the software do what it claims to do? Is the purpose of the software appropriate for computer processing? (If you could do the same thing manually, are there good reasons for using a computer instead?)

Can the software be returned for a full refund within 30 days after receipt? (If not, what satisfaction can the dissatisfied purchaser obtain?)

Does the company make adequate provision for back-up copies? (The best plan is to have a back-up copy available on-site. However, the company should at least agree to send you one overnight in the mail.)

If the software is to be used at multiple sites, will the company sell multiple copies at a discount? (Terms on volume purchases are definitely negotiable.)

Are installation assistance and user training provided as part of the purchase price? (The more complicated the function being performed, the more important user training, support and service become.)

Is support available from the supplier through a toll-free phone number?

Does the software provide for some form of security, especially for financial and confidential student data? (Several levels of security might be desirable and could be incorporated into the software at little extra cost.)

Is the software capable of being integrated with any other software? (The data you use in one program should be useable in another.)

Is the software flexible enough to meet your school district needs and yet not so complex as to be confusing? (The best software is designed with the goal of being flexible but simple. Most software can be modified to meet local needs, but it may not be cost-effective to do so.)

Does the company provide periodic updates to the software at little or no extra cost? (A good company revises its software periodically and should provide the revisions to existing users at little or no extra cost. Revisions which correct errors in previous editions should be provided at no extra cost.)

* * *

The software you purchase will be much easier to use if it is accompanied by good documentation--printed material which describes and explains the program and its operation. Before you buy

anything, try to formulate answers to these questions about documentaion:

Is the documentation provided with the software complete, clear, understandable, consistently written and well-organized?(Do not underrate the value of good documentation. Also, do not let the appearance of good documentation mislead you into believing that the software has been prepared with the same amount of care.)

Does the documentation have a thorough index and table of contents for quick reference, a help section, illustrations of input screen displays and output report formats, descriptions of file capacities and an overview of the system?

Does the documentation provide an understandable way for the user to determine the amount of storage that will be needed for the specific setting at hand?(Before purchasing the software, you should be able to determine whether a floppy or a hard disk configuration of hardware should be used to handle the functions being considered.)

Does the company provide periodic updates to the documentation?

* * *

You and your staff will have to input all the data to be manipulated by your software. Consider these questions about input:

Are fields for entering data well-defined and self-prompting?(When the software is requesting data, no confusion should exist about what kind of data is to be entered, where it is to be entered and at what time.)

Are potential errors at the time of input well-diagnosed and described in an understandable way?(The software should not signal an error down in the machine-language jungle if all you did was type in a letter where you were supposed to type in a number or if you made some other reasonable input error.)

Are data fields designed to accommodate the sizes and formats of data needed in schools? Can user-defined data fields be created?

If need exists to recall a specific record, can it be accessed by record number or by searching any field for its specific contents?(If one of the fields is first name, can all records with first name of John be accessed one at a time?)

* * *

You should also decide whether the software you are considering provides you with necessary and convenient feedback during processing. Specifically:

Is the software menu-driven; that is, does it offer the user a series of menus listing the tasks it can perform?(And if so, is the order of selection on the menu the same as the sequence of operation of the programs in normal use?)

When the software is running, does it give the user feedback about what part of the processing is taking place?(During the operation of the software, pauses of varying lengths may occur while the micro-computer is processing data. During these pauses, some kind of feedback should be given to the user on the video to indicate that processing is proceeding normally.)

Does the software provide for easy restart and recovery in case problems occur?(If something out of the ordinary happens during processing, can the program be restarted without returning to the beginning?)

* * *

The whole purpose in buying software is to produce the kind of output you need. You should determine answers to these questions about output:

Does the design and format of information produced by the software meet district, state, and/or federal requirements so that this information will not have to be entered onto other forms by hand?(This criterion may encourage you to select

software from a vendor located in your state or from a vendor who has designed the software for your state.)

Upon output of the information, can the user choose to have it printed on paper or displayed on a video screen?(If the output can be reviewed on a video before it is printed, you will save time and paper.)

Are reports formatted in an easy-to-read manner using appropriate abbreviations, spacing, and print size?

Deciding what software to buy requires serious study and plenty of questioning. But your efforts will be rewarded when the software you select proves to be the best possible product for you and your office, school or district.

Choosing the Right Hardware

Now, you know what software will best satisfy your needs. The choice of hardware depends on your selection of software. Whatever else it may do, your computer must be able to run the software you want to buy.

This book tells you what hardware is required to run each program described. But when you select the software you want, talk to the software vendor or vendors to see if the product will also run on other machines which are very much like the models listed--the so-called "clones." If so, there will be more choices open to you, a situation which usually benefits the buyer.

The minimum microcomputer configuration you will need for administrative applications will be a standard typewriter keyboard; an 80-character-wide screen with a diagonal measure of at least 9 inches; a 132-column-wide quality dot-matrix or character impact printer; 64K of memory and two floppy disk drives. Many programs require more sophisticated systems, however, as the entries in this book indicate. Whatever configuration you decide on, evaluate your choice by contacting other users who have experience with such a system.

As you visit dealers to see demonstrations and try out hardware, some words of caution are in order. Don't accept everything a

salesman tells you any more than you would when shopping for a car. Don't allow the salesman to dazzle you with jargon... if a machine is a great one for your purposes, its qualities can be expressed in simple English and you should keep asking for explanations until they begin to make sense to you. Finally, don't fall into the trap of thinking that there is an ideal computer for everyone and that you ought to buy it. In fact, the best computer for you will depend on what functions you want it to perform. So consider your particular functions as you establish answers to these questions about hardware:

Is the printer appropriate for the planned uses of output information?(Is a dot-matrix or character impact printer best? Is a tractor-feed or friction-feed printer better? What about noise level?)

How much and what kind of primary storage should be available?(Should the random access memory be 64K, 128K or more? What features should the read-only memory have?)

How much and what kind of secondary storage should be available?(What combination of tape, floppy disk, hard disk and program module storage devices should be present? What storage capability should each have?)

What kind of processing speed is desirable?(Be sure to check the speed of the computer as well as that of the storage devices and the printer.)

How available is other software for the micro-computer?(The best hardware is worth little without good software.)

What operating system is necessary for the software being considered?

What type of interfacing with other computers is desirable?(Should the microcomputer be networked with others? Should it be capable of being connected as a terminal to a mainframe computer?)

What kind of reliability and durability does the hardware have?(Ask other users of the same hardware what problems they have experienced.)

How expandable should the hardware configuration be for future uses?(What type of additions of disks, memory, printers, optical readers, light pens, networking, data transfer to other computers, etc. should be provided for?)

What kind of reputation does the manufacturer as well as the retailer have for support?(Support should include installation, service and training.)

Does the computer come with quality documentation?

What will it all cost?(The initial purchase cost, maintenance cost, software cost, training cost, etc. all need to be considered.)

Is the keyboard easy to use?(Is it a standard typewriter keyboard? For situations involving a significant amount of numeric data, does the keyboard have a separate numeric keypad?)

Is the monitor/screen appropriate for the applications planned?(Is a green phosphor or color screen best for your use? What degree of resolution, clarity, and readability should the screen have? How many lines vertically and characters horizontally should the screen have?)

You should observe one final caution when your hardware and software has been delivered and you are ready to implement your automated system. Run the new system in tandem with the old for a considerable period of time before dismantling the old. If there is some unforeseen deficiency in the new system, this precaution will sustain your operations while corrections are made. If there is no deficiency, tandem processing will breed confidence in the new system before it replaces the old.

* * *

Nobody ever said that selecting an administrative microcomputer system was easy. You are going to have to plan well, think hard and choose prudently. But you are not entering a trackless wilderness. Thousands of administrators have automated their operations

successfully and the resulting increase in productivity is being felt in school districts throughout the country. If you follow the steps outlined above, you will maximize your chances of bringing the full benefits of automation to your district, as well.

The Big Three in Office Automation: Data Base Management, Spreadsheets and Word Processing

By Dr. Joseph R. Little, New Jersey School Boards Association

The bulk of this book is devoted to specialized microcomputer software that performs what are essentially record keeping and data manipulation functions for school administration. School administration on a microcomputer, however, is not limited to specialized packages. Some functions of a district or a building office can be addressed through office automation technology. This technology can be divided into three general categories--data base management, spreadsheets and word processing. These functions can improve the efficiency of almost any modern office.

Data Base Management

Many administrators begin to move in the direction of office automation by purchasing some sort of data base management software for a microcomputer that already exists within the school district. This procedure is not a bad way to begin increasing your office's efficiency; it allows your district to "get its feet wet" in the area of office automation without a large investment in time or money. A little planning and research in choosing a data base management package, however, will pay dividends later on as your district becomes a more sophisticated user of office automation.

First, what is data base management? In its simplest form, data base management is a type of electronic filing; school districts often use this filing system for personnel records, inventories and student records. Perhaps the easiest way to understand electronic filing is to visualize stacks of index card; each stack of cards contains information about students in your district or building. One stack of cards might contain information about seventh graders and another, information about eighth graders. In data base management applications, a stack of cards would be considered a file--a body of information about a topic that is stored under its own file name (e.g. "Grade 8"). Each card within a file (stack of cards) is called a

record--a set of data about one student. Each record contains variables--individual elements that are the same for each student. That is, each card might contain variables called "Name," "Address," "Activity," "Bus," and "Phone." Each variable will have a field associated with it, an amount of space to accommodate data about that variable. With the stack of cards metaphor and the key terms firmly in mind, you can begin to understand what data base management can do for your district.

A data base management system can quickly find a given record. That is, you can find John Smith's record by just entering his name into the computer; however, unless your file is very long, simply finding one record is not much of an improvement over an alphabetical stack of index cards. Data base managers, fortunately, can be much more useful than simply find John Smith's record. A good package will allow you to search on a number of variables at once. You can, for instance, locate all the eighth graders who are in the band and who leave school on bus number four by accessing the "Grade 8" file and stipulating "band" under the variable "Activity," and "4" under the variable "Bus."

Searching for a list of students who meet certain criteria is not the only advantage of electronic filing. Assuming that you know that the eighth graders in the band who leave on bus 4 have been misbehaving, you may want an alphabetical list of their names and their parents' phone numbers. A good data base management package will allow you to select certain variables (eighth graders in the band on bus 4), sort by a variable or variables ("Name") and print out only the information that you need ("Name" and "Phone"). Should you want to send a letter to the parents of the unruly eighth graders, many data base management programs contain a mailing label feature that will allow you to output the parents' names and addresses in mailing label format onto peel-off labels set up on your printer. Needless to say, your secretary will find this feature very attractive!

Your secretary will also like the editing that electronic filing typically allows. That is, if a student is dismissed from the band for misbehaving, his or her band activity can be removed from the file and a new band list (alphabetical if you desire) can be printed out at any time without your secretary typing up a new list. Similarly, activities can be added, addresses updated and phone numbers changed through the edit feature without the endless retyping that secretaries typically endure.

Assuming that your district elects to try a data base management package, how do you select a program from the wealth of software that is available? If your district plans to use a microcomputer that it has already purchased, your choices will be constrained by the brand of microcomputer you are currently using. If your district plans to purchase a microcomputer for office use, your choice of hardware should be based on the software you anticipate using. In either case, there are certain desirable features to look for in any data base package.

The first and most important feature to look for in a package for a district just starting in office automation is "friendliness." That is, how easy is it for a computer novice to use? The program should have menus that make it easy to understand what your choices are at any point and what you have to do to select an option. Some programs also have help screens which provide information about problems you may be having. Finally, the software should come with clear documentation written for the first time computer user.

The problem with friendliness is that it consumes memory, so software writers face the dilemma of making a program friendly or making it powerful. One of the most popular and easy-to-use programs currently on the market is called "Personal Filing System (PFS). With it, the newcomer to office automation can quickly learn to enter, select and sort data on low-end microcomputers commonly found in most school districts. The trade-off is that PFS is limited in the number of records that it can process and it doesn't have all the utilities or the flexibility of more powerful programs. It is possible to outgrow PFS as your district finds more and more things it wants in its data bases. Still, PFS remains an excellent choice for the first time user (especially if there is a great deal of computerphobia in your office), and if you have to go to another data base package later on, the experience gained with PFS will not have been wasted.

For the more sophisticated user, DB Master is a very powerful data base program that has many of the features if not the speed of software that runs on larger mini computers. DB Master, however, does not have a reputation for friendliness. The producers of DB Master claim that the newly released advanced version of their software is easier to use and that this version will read PFS files; thus, there can be a progression from PFS to DB Master without

having to rebuild your data bases. Feedback from school districts about this feature is not yet available so if your district plans to go this route, it would be wise to insist on a very detailed demonstration of this version.

There are, of course, a great number of other data base packages on the market. Two of the most popular packages for low-end microcomputers are PROFILE and VisFile. These packages may lack some of the friendliness or the power of the other two programs, but they have been on the market for some time and can be very useful in school offices. For the administrator who wants to go beyond the low-end type of application, dBase II (for CP/M based systems) has been used successfully for a number of years in business applications, and Quick File is gaining a reputation for speed and friendliness.

If your district so desires, it may even wish to purchase a hard disk microcomputer which will increase both the amount of data can be stored and the speed of data retrieval. This type of microcomputer, however, is considerably more expensive than the usual, floppy disk type of microcomputer found in most school districts.

No matter what hardware is being used, the choice of software remains paramount. In addition to friendliness, there are five other essential considerations when you choose a data base program:

Can you search and sort on every variable in the file? Some packages will allow searches and sorts only on certain predefined variables; if your needs change later on, the data base may have to be rebuilt.

Does the program allow you to change the design of the file without rebuilding the entire data base? If you need to add a new variable at a later time, can you do it, without having to retype the entire file?

Can you integrate this package with other microcomputer packages? This feature will be especially important when your district goes into word processing. You will want to be able to read names, addresses and other variables into a word processing document, saving hours of retyping by your staff.

How much information do you need to store and how fast do you need to retrieve it? If you have a large storage requirement with fast turn-around time, you may very well need a program that runs on a hard disk. If all you need is a list of 100 parents' names and addresses a week from now, you need not worry too much about storage capacity and speed of retrieval.

Do you need data security? For some data base programs, anyone with the program and the data disk can read or even change the data. More sophisticated programs provide levels of password protection and you can assign passwords to restrict access to certain files or variables.

In summary, through the judicious use of data base management software, a school district office can experiment with office automation as well as increase its efficiency through electronic record keeping. This electronic filing often includes such applications as student records or various types of inventories (textbooks, supplies, etc.). Whatever package is chosen for whatever application, bear in mind at all times that some human being must take responsibility for inputting the data and keeping it up to date. Often it is far easier to design a record keeping file than it is to ensure that the records themselves are accurate and current!

Spreadsheets

Electronic spreadsheets can be one of the most useful timesaving computer applications for the busy school administrator. With its help, you can quickly perform "what if" simulations on a wide variety of data. Spreadsheets are most often used in school administration to try out various salary schedules; the impact on the bottom line of a \$200, \$300, or \$400 increment at each step can be seen literally in seconds. Other common district uses include enrollment projections, budget simulations and energy monitoring. By the clever use of a spreadsheet, you can save the time, energy and cost of writing or buying many individual programs.

The essential concept behind a spreadsheet is a series of rows and columns. At the intersection of each row and column, there is a cell which has a unique name. If a cell is in column A and in row 1, it is referred to as A1, and into A1 (or any cell) you can put data or formulas. Because the cell has a unique name, you can easily make reference to it (or to a group of cells) and quickly manipulate the

data or formulas. For example, given a budget with 200 categories, you can put the category names into column A in rows 1 through 200, and the amount allocated to each category in column B in rows 1 through B200. Once the data is input, you can enter the command "Sum" at cell B201, stipulate cells B1 through B200 and instantly get a total of whatever numbers, are in cells B1 through B200. In other words, you can change any of the individual budget amounts and the spreadsheet will instantly give you a new bottom line for your total budget. The possible simulations you can do with even a simple budget are almost unlimited given the time savings over manual recalculation. The result can be a better budget.

Electronic spreadsheets can do more than provide sums. Most can also count, average and establish minimums and maximums. Some spreadsheets even have algebraic and trigonometric functions and graphing abilities. The spreadsheet will also allow you to put your own formulas into the cells. For example, in a salary simulation you might want to enter a base salary into cell B1. To find the cost of teachers at that step, you would simply enter the formula $A1 \cdot B1$ (which means multiply whatever is in A1 times whatever is in B1) at cell C1. To see the effect of a 10% raise in the base salary, you only need to enter the formula $A1 \cdot 1.1$ into cell D1. Any time you change the value in A1 the spreadsheet will automatically perform "what if" calculations.

Most spreadsheets also have a "Replicate" or a "Copy" command. This facility allows you to quickly duplicate the data or formulas in a cell or a group of cells. For example, if you wanted to add \$200 per year of experience for 15 steps in the salary model, you would only need to put the formula $A1 + 200$ into cell A2. A "Replicate" or "Copy" command will allow you to duplicate the formula, adding \$200 to each subsequent step all the way down to cell A15, with only a few keystrokes. Thus, you can very quickly and easily construct a salary model.

Your choice of a spreadsheet is not nearly as constrained by hardware as your choice of database software. Spreadsheets have proven themselves so useful and so popular that virtually every type of microcomputer has some sort of spreadsheet available for it. Some of the most advanced models, however, are available only on microcomputers with lots of memory and storage space.

The first spreadsheet to come into popular usage was VisiCalc. This package provides 63 columns and 254 rows or 16,002 available cells into which you can put data or formulas. These numbers, however, are somewhat misleading; it is unlikely that you actually will be able to use all these cells. Spreadsheets consume a lot of memory when they are loaded into your micorcomputer; VisiCalc takes up 32K of memory when it is loaded into an Apple. If you have only 48K of memory in your Apple, you can use up the remaining 16K rather quickly if you start to construct large, complicated models. Also, you should keep in mind that as the available memory is used up, the speed of calculations will slow down. One answer to this problem is to buy more memory. Another is to construct a number of smaller models and save them on a small piece of your overall model at any one time. For example, instead of doing five different salary models at one time, you would construct one model at a time and save each on a disk.

Since it was the first to come into the market, VisiCalc has a number of advantages. First, there is an abundance of books available on using this package. Second, sample "templates" (VisiCalc models saved on disk) are available from other users at little or no cost. Finally, data saved on VisiCalc "DIF" (Data Interchange Format) files can often be read by data base and word processing packages. Thus, you can save yourself the time and aggravation of re-entering the data should you want to make use of your VisiCalc data in one of these other applications.

VisiCalc's popularity has bred a number of competitors, some of which offer features beyond even the advanced version of VisiCalc. One of the best of these newer spreadsheets is Multiplan. This package has the same number of rows and columns as VisiCalc but is even easier to operate. Multiplan allows you the option of putting a pointer (called a cursor) over various commands displayed on the screen and executing them by simple hitting the "Return" key. Multiplan also allows you to stipulate a cell by positioning the cursor.

Another of Multiplan's improvements is its ability to sort a range of cells, so you can quickly alphabetize a list of names or rank a list of values. This sorting facility gives Multiplan one of the features of data base management and expands its possible uses for school administration into such applications as simple attendance and grading reporting. Multiplan also has the facility to link worksheets

(models). That is, by giving a cell the same name in two or more worksheets, a value assigned to the cell in the first worksheet will automatically appear on the second or dependent worksheet. This feature can be very useful for reporting summary data over a number of years. For example, summary data for two different salary models over a two year period can be reported on one dependent worksheet. This facility is also desirable if you are constrained by the memory available on your microcomputer; you can prepare several smaller models and link them. Multiplan, furthermore, can read VisiCalc files and convert them into its own format; you need not start over if you already have VisiCalc and want to switch to Multiplan.

A third generation of "integrated" spreadsheets has come onto the market in the last year. The leader in this field is called "1-2-3" and is sold by the Lotus company. This powerful program has 256 columns and 2048 rows for a total of 524,288 cells! It has some rather limited word processing capabilities, some data base management features, including the ability to sort within a sort (for example, to sort any grade and by last name within grade), and a built-in graphics capability. Lotus (as it has come to be called) is still primarily a spreadsheet, but its integrated features make it very easy to produce professional looking reports, complete with graphs, in a very short time. You can, for instance, build a salary model using its spreadsheet functions, turn the spreadsheet into a memo through its word processing functions and add a graph showing the various costs associated with each level in education (BA, BA plus 15, MA, etc.). All these capabilities, however, do not come cheap. Lotus, as of this writing, runs only on the more expensive microcomputers, most notably the IBM PC and some micros using the MS-DOS operating system. Lotus, also, consumes computer memory at a prodigious rate, particularly when it is used in the manner of a data base. If you envision using Lotus as a data base manager, you would be wise to purchase lots of memory (512K and up). An even more powerful version of Lotus, called "Symphony," came on the market in mid-1984 with improved word processing and a communications feature. A guide to this and other integrated software packages and their features is included in Dr. Leroy Tuscher's article which follows in this book.

In summary, a big, integrated package is the most desirable type of spreadsheet if you can afford the initial price of the package and the memory requirements. You need not wait to take advantage of

spreadsheets, however, if your resources are constrained. Some type of spreadsheet is currently available for almost every type of microcomputer-some versions are even available on cassette tape for microcomputers without disk drives. Perhaps the only real caveat in purchasing a spreadsheet is to be sure that the package you purchase will actually "address" all the memory you have available in your microcomputer. One package, when it first came onto the market, would only address 64K of memory no matter how much memory was available in the microcomputer! The manufacturer has since fixed this flaw, but you should be aware of such problems when acquiring a package that has been on the shelf for a while or when buying used software. If you have access to a microcomputer and are not taking advantage of some sort of spreadsheet, you are neglecting a tool that can save you large amounts of time and improve the quality of your decision making.

Word Processing

If you work in a large school district, chances are that your administrative office has used word processing for years. The microcomputer makes it possible for the smallest school district or even individual buildings to make use of word processing as a part of an office automation plan. You should keep in mind, though, that word processing is probably the most expensive of the "big three" to implement, and you may encounter considerable resistance from secretaries unwilling to part with their favorite typewriters.

Basically, word processing gives you the ability to enter text into the memory of a computer. Once the text is entered, you can store it, recall it and, most importantly, edit it. That is, you can correct a typo or a spelling error without recourse to correction fluid or tape; you can move words, sentences and whole pages around in your document; you can even try out different words and phrases without massive retyping. The time savings for you and for your secretary can be enormous!

There are a great many word processing packages available for microcomputers. If you intend to use an existing microcomputer, your choices will be somewhat limited but there are so many packages available that your chances of finding a suitable package for your hardware are very good. What should you be looking for in word processing in a school office? The key question to ask in this regards is, "Who is going to use it and for what?" If you are going to

be the primary user to do reports for the board of education, your needs are quite different from those of your secretary who has to get out a letter to the parents of all sixth graders in danger of failing.

One crucial consideration must be addressed no matter who is going to be the primary user of the package--it must be sufficiently friendly to ensure that it is, in fact, used. This feature is especially important in overcoming the computerphobia common among secretaries still clinging to their typewriters. There are some very powerful word processing programs gathering dust on school district shelves because nobody wanted to learn how to use them!

Besides being sufficiently friendly, a good word processing package for a school district must have a glossary feature. A glossary will allow you to construct, store, recall and insert text anywhere in your document. The usefulness of this feature may not be readily apparent (it is probably the most underused feature of word processing in most offices), but consider the phrase, "The student will be able to" that may be repeated hundreds of times when developing objectives in your district's curriculum guide. A glossary feature will allow you to store, recall and insert this phrase into your document as many times as necessary, and with only two keystrokes per insertion. You also can put signature blocks, memo formats and other recurring items into a glossary for use at any time in constructing your document. You and your secretarial staff are likely to be delighted by the resulting gain in productivity!

If you are going to be the primary user of the word processing package, you would be wise to ensure that the package can read any files that you have created on your spreadsheet package. As was mentioned earlier, DIF or other types of files can often be read by a word processing package. Check this feature very carefully if you do the simulations in your district and you would like to avoid retyping data for your reports.

If your secretary is going to be the primary user of the package, it should have some sort of "mailmerge" feature. That is, the package should be able to read a list of names and addresses from a file stored on a disk and insert them into a form letter. The time savings in preparing individualized letters to a large group of parents or other addresses will probably pay for the package the first time that it is used. If your district intends to do a great deal

of this type of word processing, it would be much better off with one of the high-end microcomputers with lots of memory, a hard disk drive and special function keys--merge, copy, move and glossary keys, as well as many others.

No matter who is the primary user of a word processing package, the choice of the printer to be used is crucial to the success of the system. There are, essentially, two types of printers that you can choose from--dot matrix and the daisy wheel or impact printer. The dot matrix printer has the advantages of low cost, speed and reliability; most now have graphics capabilities as well. The quality of its output, as of this writing, cannot quite match that of the daisy wheel printer, but there are some dot matrix printers on the market that come fairly close, especially if they are set to double strike each character. The daisy wheel printer produces output comparable to a document typed on the best typewriters in common office usage. The disadvantages of the daisy wheel printer are its cost, its comparative slowness and its lack of graphics capabilities.

If you are going to be the primary user of the word processing system for producing in-house reports and memos, you are probably better off with a dot matrix printer. If your secretary or staff is going to use the system for outside mailings, a letter-quality daisy wheel printer with a single-or twin-sheet feeder will probably be better for your district's image. Also, you should consider an envelop feeder for your printer in order to save the maximum amount of time in mass mailings.

For the sake of the users' eyes and health, you should purchase a good word processing screen (monitor). A green or amber screen is recommended by most experts, and the characters displayed should be clear with no flickering. Fortunately, these screens are relatively inexpensive to purchase.

Desirable features to look for in word processing software are:

- a full 80-column display (to ensure that what you see on the screen is what will come out of the printer);
- ease of underlining;
- ease of super- and subscripting;

- automatic page numbering;
- a global search and replace feature (to allow you to change all the instance of "supt" to "superintendent" with two or three keystrokes;
- the ability to edit and print simultaneously (so you can be working while your previous document is printing); and
- a spelling checker or compatability with a separate spelling package.

There are, of course, many other features available on the various word processing packages; each package will have strengths and weaknesses. The best choice is a matter of "fit" between the package and the user. The adage, "Try it before you buy it," in this case should be restated, "Try several before you buy one." Under no circumstance should you purchase the first program that is demonstrated to you, no matter what the reputation of the package or the vendor.

Finally, the physical placement of the microcomputer in the office is extremely important to efficient. Unless you intend to be a very heavy user of the equipment yourself, you probably should not place the hardware in your office. You may not want to put it at a secretary's desk either because she may get "hooked" on word possessive about the equipment. Your best bet may be to place the machine in a neutral location where you, your fellow administrators and the secretaries can use it as needs and priorities dictate.

PREPROGRAMMED ADMINISTRATIVE
APPLICATIONS

PRE-PROGRAMMED ADMINISTRATIVE APPLICATIONS

PURPOSE: To acquaint the participants with the uses, components and implementation of software for the development of the IEP and other administrative applications for schools.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
10 min	Script pg. K 51 Greet participants Introduce outline of topics and first goal	Listen, comment	Outline Script
<u>TRANSITION:</u> Let's look at IEP software, a type of preprogrammed software, and its application at your school site.			
20 min	Read and discuss pages 1-2 Stress what this type of software can do. Ask participants to rank needs.	Share their needs for software application. List and rank 3-5 users Develop a master list for group	Script 3x5 cards Chart
<u>TRANSITION:</u> Let's take a guided tour on the computer.			
		240	

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
5 min	Script pg. K 53 Introduce or read the goal 2 and activity 2 to participants.	Listen to workshop leader Do guided computer activity for IPS	Script Demo disk
30 min	Read script for participants, giving them time to attend to screens Lead discussion on software use and computer operation	Discuss applications Revise needs	Apple IIe/IIc Transparency optional for discussion

TRANSITION: If you would like to go on to see how this student information and the goals and objectives work together, stay on the system. When you get to the main menu, <press "c"> for curriculum management. Then go to the next page.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
15 min	Script pg. K 57 Read introduction to simulation on choosing goals and objectives for the IEP and data bank of CMS goals. Discuss the importance of national networks If time permits, ask users to continue to the administrative planning component	With the computer still on, the participant advances to the main menu, then proceeds on a self-paced simulation of curriculum management on the computer. Administrative planning simulation may be done as time permits or they may keep the disk and do it later.	Script Same computer Demo Disk

TRANSITION: Now that you know what the components are and do, you should see what fits your needs.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
15 min	Script pg. K 59 Leader helps participants focus on their needs and capabilities of the software that they might consider. Read sets of questions on script.	Listen, comment and note issues on the set of questions. Rather than respond too quickly they may take these to their staff for input after consideration here.	Script "Questions to Ask" Reference Articles
<u>TRANSITION:</u> The planning and implementation plan is our next step.			
30 min	Script pg. K 62 Guide participants through the activities of planning and implementing the IEP program or other administrative software.	Participants will go through the pert chart and explanation of tasks, then modify or add to the chart to customize to their needs	Pert Charts Red pens Pencils Small Post-its

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIALS OR EQUIPMENT NEEDED
15 min	Introduce the activity, guide them through the major elements and the pert chart and then read to them the instructions on modifying their chart. Wrap-up, summarize points Move into last phase--avoiding the pitfalls. Script pg. K 66 Goal and activity 6 Read and encourage discussion on pitfalls. Since this is a short list, ask for other potential difficulties to avoid.	Listen, comment Add items, examples to list	List of Pitfalls Chart

TRANSITION: Training is not complete without evaluation.

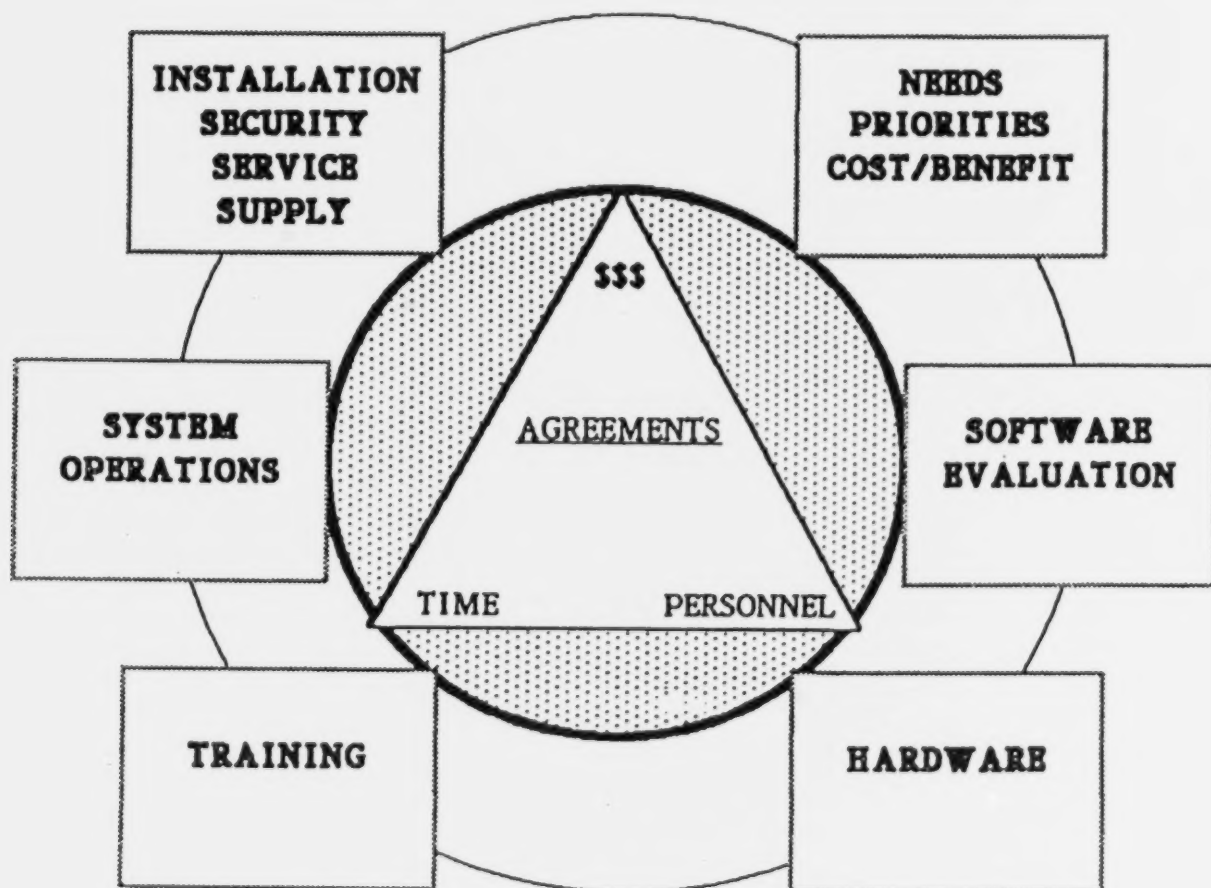
PREPROGRAMMED ADMINISTRATIVE
APPLICATIONS
AV SHEET

PREPROGRAMMED ADMINISTRATIVE
APPLICATIONS
TRANSPARENCY

The Computerized IEP

- 1. What can an I.E.P. program or database management do, (Reports, lists, forms, form letters, grouping, searching and sorting)
What do I need/want for my school (s)**
- 2. Let's see what one looks like and how it works.
Computer Simulation & Guided Tour.
What are the major parts of a good I.E.P. program?**
- 3. How does this help the child's curriculum?**
- 4. What should I consider when buying a program?**
- 5. Why is planning so important? - PERT Chart-
What are the elements?
How do I begin to set it up?**
- 6. What are the pitfalls I should avoid?**

**ADMINISTRATIVE
PLANNING GUIDE FOR
MICROCOMPUTER APPLICATIONS**



PREPROGRAMMED ADMINISTRATIVE
APPLICATIONS

SCRIPT

PREPROGRAMMED ADMINISTRATIVE APPLICATIONS

TRANSITION: Let's look at IEP software, a type of preprogrammed software, and its applications at your school.

GOAL: To become familiar with the major uses of IEP software, and its value if applied at the participants' site.

Points to Cover/Script:

This software is actually a sophisticated database. It organizes comprehensive information on students, staff, and educational programs. It keeps the data in your own customized structure and can print out reports, lists, profiles, letters, and mailing labels in any format.

Programs of this type make organization and record keeping more efficient. The tasks they perform are the drudgery jobs that teachers, staff, and administrators hate. It frees professionals from these types of tasks, allowing them to concentrate their energy on service delivery and other qualitative issues.

Be thinking about the tasks that this and other administrative software might do for you.

Good programs of this type should be able to:

- 1. Provide a structure for generating IEP reports quickly, once it is set up.*
- 2. Help teachers and IEP committees locate goals, objectives, and resource information quickly to plan components of the IEP lessons.*
- 3. Centralize and organize all information on students and their educational programs. The information can be searched and sorted in seconds to provide whatever information needed about one student or many students.*
- 4. Assist teachers and administrators in tracking and reporting performance, services used, transportation, lunches,*

grades, attendance, testing and review, special needs, referrals, and any other data necessary about the instructional system.

5. Generate custom reports in practically any format. These include IEPs, letters or notices to parents, local, state and federal reports, mailing lists, special area reports, as well as system-wide reports.

6. Provide for easy updating of records so that achievements are recorded and next year's program builds upon the accomplishments of this year.

7. Provide for easy access by qualified persons but guard confidentiality of student and staff information.

SUMMARY: *Find out what types of applications of this software would be most useful to the various participants. Discuss the previous applications and then have them complete the following activity.*

ACTIVITY 1: *On the cards provided write 3 to 5 uses of this type of software application for you and your staff, one card per use. Stack them in order of priority for you or for your teacher/staff. If you cannot think of any, recall an activity that you or they spent an inordinate amount of time on and write that down. We will then see if we can fit that task into this type of software program.*

When they have finished, go around the room and have each person read off their first need and list it on a chart or chalk board. Continue with the second item on each list and so on until there are no new applications or needs listed. Discuss which of these are typical applications of IEP software.

TRANSITION: *Let's take a "guided tour" on the computer.*

COMPUTER GUIDED TOUR

GOAL: To make it real. To provide a chance to see what this process is like on the computer with a simulation of the program.

Points to Cover/Script:

ACTIVITY 2: Take a guided tour of an IEP program on the computer.
YOU WILL SEE:

1. The steps involved
2. The way data is kept
3. The planning, managing and reporting capability of the software
4. How information is updated
5. How different reports can be generated from the same database

Gently insert the disk labeled "Management Software Demonstration" into the disk drive and close the door. Now turn on your Apple computer. This is the Apple version. The IBM version is very similar.

[**NOTE-The numbers refer to the sequence of screens you will see. The < and > tell you what to press on the computer.]

1. When the screen comes on with "try me" then <press any key>.
2. Take time to read the screen about capabilities. then <press any key>.
3. When you see the learning tools main menu, take time to read the items. We will first be looking at the Individual Planning System (IPS) <press "I">.
4. Read this screen to find out about creating, planning, and managing information. For more information <press "M">.
5. Read about IPS planner, manager, and report. These are the programs within the IPS. Manager sets up the templates and

customizes the system. Planner is used for the daily running of the information such as editing and printing reports. Report creates report formats. When you are ready, <press "M">.

6. Now it is time to try out a sample look at the menu of capabilities. You will complete the same steps as if you were actually using the program. <press "V" to view>.

7. To get a file on an individual you would type in their name. We will look at the screen then follow the instructions in the square in the lower right. <Hit return>.

8. This is a menu of major sections in each record. There will be subsections and information under each category. You could also create more or different sections if you like. There are sections, subsections and data that are hierarchically arranged. To move around the menu you will hit "j" for jump. Follow the instructions and then <press "s" to see>.

9. These are subsections under the individual information section. You could have any subsections that you want under your categories. <Press s> to see more under that category.

10. Now we see the actual data fields with a particular student entered. Notice the fields of data showing the type of information kept. You could have any information kept. You could have any information you want, as many fields and types as you need.

Now follow the instructions in your lighted square. <press "J" to jump> until you are at "home town".

11. We will update the item. <press "E" to edit>.

12. The screen shows you that there is a menu or list of home towns. This is one easy way of having users enter information. This works well if there are a limited number (15 or so) of choices that may be used. It would not work where you have a wide number of choices, such as street names. To choose a new home town <press "A" and return>.

13. Now we will edit another bit of information that may be incorrect. Follow the instructions in the lighted square. <press "J" 6 times then "D" for details>.

14. <press "E" for edit>. We see another menu used for the various languages. <press "S" for Spanish>. The data will be changed.
15. Let's look at a category that needs special information. Certainly not all of our information is going to be short items or fit on menus. <press "J" > <press "E">.
16. This data item, which contains emergency information, is written in extended text. This type of data field allows for sentences or paragraphs. It is important to be able to enter this type of explanatory information when needed. When you are ready to continue, <press "T">.
17. Now let's look at another section of the record, the instructional program. <press "J"> 3 times to jump. <press "E"> to see.
18. These are the subsections under the instructional program. You would probably have more areas. To see more about math <press "J"> while the cursor is on math.
19. Under the category of math in the instructional program section, you see the actual math goals and objectives for Elena. These may be typed in, or pulled from the curriculum disks that are available for this program. <press "M">.
20. This screen shows a sample of a custom report. You are of course interested in an IEP. It's important to know you can have that IEP in any format that you want. Most schools start out putting the reports in the same format that they are currently using so everyone will be comfortable with it. Later they may change the format of the printed report. You can easily have many types of reports and formats (one for the locals, another for the state, a third for the feds) and you never have to change the database. <press "M">.
21. This is a status or progress report for the review process. It is another example of a custom report. It sorts out and lists the exact data you need on each of the students and prints it out in table form, in whatever order. For example, you might want different information for administrative purposes. You might need to know about the students using transportation or speech and language services, etc. When you are ready, <press "M">.

22. These are some important considerations for IEP and administrative software:

1. You can customize the system to your needs.
2. You can expand it later without starting over.
3. The screens and commands are written in plain English and it's easy for folks to learn to use.
4. It can provide many different types of reports in formats you want.
5. You can add on to a large database of goals, objectives and resources in all of the curriculum areas.
6. You can browse the file for information or goal setting.
7. You can transfer information from the local site to a central computer.

<press the escape key - "esc">



Let's stop and talk, but don't turn off your computer. Did you think of some other uses for this type of software? If so, let's add those to the list.

If you would like to quit for now, remove your disk and turn off the computer.

TRANSITION: If you would like to go on to see how the student information and the goals and objectives work together, stay on the system. When you get to the main menu, <press "C"> for curriculum managment. Then go the the next page.

MANAGEMENT OF CURRICULUM AREAS

GOAL: To see what other helps are available for teachers and administrators for both curriculum development and resource management.

Points to Cover/Script:

ACTIVITY 3: A self-paced tour on the computer through curriculum management.

One of the major reasons for the IEP is to assure that each child is receiving an educational program appropriate to his or her needs. Along with the services, the goals and objectives specify this type of program.

One of the main uses of IEP software is the quick choosing and/or updating of appropriate goals and objectives.

Hopefully this also provides some continuity within the program for each child and consistency between schools within the system.

This section of the program provides you with the ability to generate or choose goals, objectives, methods, materials, lesson plans, tests or other evaluations for each child in each of his or her curriculum areas.

In this program from Learning Tools an important feature is the ability to tap into a large database called CMS Network. They have 16 disks of goals and objectives in every area which are already done and are available for \$5.00 per disk. You may then copy these disks for each site that wants them. This may function as the core of your goals and objectives. You may then add as many more as you want. This saves perhaps thousands of hours of work and gets the system up to speed quickly.

- 1. To learn more, make sure you are at the main menu and <press "C">. Read the next screen.*

- 2 *Now <press "M"> and continue the guided tour on your own. Follow the instructions on the screen.*
- 3 *After you finish the CMS guided tour you may want to go through the administrative planning component. If so <press "A"> when you return to the main menu.*

TRANSITION: Now that you know what the components are and do, you should see what fits your needs.

CONSIDERATIONS IN THE SELECTION OF IEP SOFTWARE

GOAL: To assist the participant in beginning to identify the needs of their school or LEA and determine the features they should look for in an IEP program.

Points to Cover/Script:

ACTIVITY 4: Consider the following points about software selection. Do this in your head first then make notes in pencil.

CAUTION: There is no need to come up with all of the answers now. That would very likely lead to a premature, insufficient set of choices. This is best done as a group process. You may want to read the following reprints as well:

1. Selecting Microcomputer Systems for the School
2. Questions About Administrative Software
3. Data Bases and Special Education IEP Reports
4. Microcomputer Planning Guide

Questions to ask yourself and others (take 10 minutes to read through these then report your 4-5 most important items to the group)

1. Based on the previous activities in this section, rank your needs and wants with regard to computer application for IEPs and administration. You may want to look over the duties of your teachers and staff as well. What tasks take the greatest amount of time and money that a computer could be doing?
2. How many students, teachers, and schools would ultimately be on the system when it is fully operational?
3. Would you want to use a microcomputer at the school site but also store data on a central computer for administrative purposes?
4. Do you have computers at the schools now? If so, what kind?

5. Were you planning to purchase more for administrative functions?
6. What funds or other resources do you have available now or will you have over the next year to support this project?
7. Do you have a person who has some background in computers and can talk supportively to people that will be assigned to oversee the implementation of the project? What will the cost of that person's time be?
8. Will teachers and other staff be using the system? If so, get a program that is easy to use so you don't have to spend a lot of time and money on training. Hopefully other staff time will be saved, once the system is in place, because the process is computerized.

About Software:

1. Do you want a particular format for your IEP or would a generic one on the program be O. K.?
2. How can you be assured that the goals and objectives the program generates will be sufficient for each child? Does the teacher pick the goals? Can you easily add to the goals, either for one child or for your whole bank of goals?
3. Would you like to do more than just an IEP? If so, can the program generate other reports, etc., also?
4. How flexible is the program? Can you change fields or data items easily even after the system is all set up and running?
5. On what computers will the system run?
6. What is the cost of all the software you will need?
 - (A) for one school
 - (B) for several schools (discount for multiple copies?)
 - (C) for a centralized system
7. Are there hidden costs? Is there some built-in mechanism that makes you dependent on the software company for expensive help or user fees?

8. Is there any mechanism for customer support, such as a telephone hotline?

9. How many students can this software and hardware realistically handle?

10. How easy is it to use? Is there onscreen help or prompts for what you need to do? Are there tutorial disks and exercises or example cases in the documentation?

11. Look at the documentation. How easy is it to follow? Does it have step-by-step instructions as well as examples and diagrams? Does it use plain English or technical jargon? Does it have a good index?

12. Flexibility and ease of use interact sometimes. A simple but inflexible program will soon be frustrating for the things it won't do. A complex program can be implemented by a novice if the steps to implementation are well-documented. A complex program without step-by-step instructions can be a horror because only a sophisticated computer person can manage it.

13. Are there levels of use so that the average teacher or staff person can use it quickly without much training while a manager who might have more expertise could do more with the system and have more skill with it?

14. Do you think it is worth the costs? It is good to think of this as an investment. Obviously it will take some work in the beginning so you must look for the payoff down the road. You only set up the template once. You only enter a child's information once. Thereafter, you change only the information you need to change. It becomes faster, more efficient and versatile the more you use it.

15. Do you know of others who are using the software under consideration? Talk to these people, and if possible, visit them and see how easy and quick it is and how the reports can be formatted.

TRANSITION: The planning and implementation plan is our next step.

PLANNING AND IMPLEMENTATION

GOAL: To be guided through the process of planning and implementation of a sophisticated IEP program that requires some staff training. To practice applying this model to the system at the participant's home site and identify what types of changes should be made.

Points to Cover/Script:

ACTIVITY 6: *Use the PERT Chart to discover the steps in the process. They will be introduced to the chart, then asked to assume this project or another, similar application is going to be implemented in their school or system. If that were to happen, what changes would you make?*

1. *Put modifications, additions, or questions on the small Post-it notes.*

As Time Permits:

2. *Each task box can also have the name of the person responsible, the estimated duration of the task, and the estimated cost, either in staff time or capital expenditures. The earliest start times have been listed on the upper left of each box. Of course, these would be changed when all of the durations are added.*

Participants will then present their implementation to the group or consultant. Perhaps further modifications will be made, based upon discussion and feedback.

EVALUATION CRITERIA: *The chart should have a logical flow and have all of the major categories as listed on the ADMINISTRATIVE PLANNING GUIDE or the Chart.*

Look at the PERT Chart for COMPUTER APPLICATIONS FOR SCHOOL ADMINISTRATION - IEP IMPLEMENTATION. This chart shows the actual planning and implementation of the SERN project on computer managed IEPs. You will notice that it contains all of the elements in the ADMINISTRATIVE PLANNING GUIDE FOR MICROCOMPUTER APPLICATIONS that you have already seen. These elements are labeled as they were implemented in the flow of the project. We will now go through and see the task boxes associated with each element. You will notice that in a project such as this the elements re-occur as they are needed. The item PERSONNEL is not labeled because it occurs in most of the sections. If you have questions or suggestions about modifications, bring them up as we go.

ITEMS ON THE CHART
(PAGE ONE)

NEEDS ASSESSMENT - ALL LEVELS

AGREEMENTS

RESOURCES-

TIME,
FUNDS,
SPACE OR SITE,
EQUIPMENT,
EXPERTISE &
PERSONNEL

(PAGE TWO)
SOFTWARE

TIMELINES

HARDWARE

PLANNING OF IMPLEMENTATION

(PAGE THREE)
DEVELOPMENT

TRAINING

DESIGN OF TEMPLATES AND FORMATS

INSTALLATION

HARDWARE
SECURITY
SERVICE CONTRACTS

SUPPLIES

TRAINING

DESIGN
CONDUCT

(PAGE 4)
SYSTEM OPERATION

REFINEMENTS
HOTLINE SUPPORT

Now let's assume this project or another, similar application is going to be implemented in YOUR school or system. Look at your chart and customize it to fit what you might do. If that were to happen, what changes would you make?

1. *Put modifications, additions, or questions on the small Post-it notes.*

As Time Permits:

2. *Each task box can also have the name of the person responsible, the estimated duration of the task and the estimated cost, either in staff time or capital expenditures. The earliest start times have been listed on the upper left of each box. Of course, these would be changed when all of the durations are added.*

Participants will then present their implementation to the group or consultant. Perhaps further modifications will be made, based upon discussion and feedback.

EVALUATION CRITERIA: *The chart should have a logical flow and have all of the major categories as listed on the ADMINISTRATIVE PLANNING GUIDE or the Chart.*

PITFALLS

OR HOW NOT TO LEARN THE HARD WAY

To avoid pitfalls in choosing and implementing administrative or IEP software:

Points to Cover/Script:

1. *Plan thoroughly so that you know what you want to do, not only now but in the future. Then invest in a system that can meet your needs now and be expanded to meet future needs later. One of the biggest mistakes is not having enough capability or flexibility to do what you want. Good systems allow you to start fairly small, say at one or two schools. Then, when you want to centralize or expand, buy one more software component and a network or hard disk. You just add on, not start over. You will see how much time this will save and you will want to use it for more things. But, caution: don't buy all new software and hardware at this point.*
2. *Allow adequate time and personnel to accomplish the job. It will pay off in the long run.*
3. *Get sufficient input from those who will need to use it so the programs will ultimately meet their needs.*
4. *Get agreements from all those involved about tasks, responsibilities and timelines. There is a tremendous interdependency here. If one person doesn't do his job it can cause delays that may ruin the efficacy of the whole system.*
5. *Check out the companies involved. Do they have a good track record and many users? Do they have reasonable guarantees? Do they have a hotline for help when you need it?*
6. *Try before you buy. Never buy a program that you have not tried or seen before in some way, at least on a demo disk. Companies should have at least a 30 day return policy, so that if it doesn't really "fit" you are not stuck with it. If you have a choice*

between 2 programs that will meet your needs, choose the one that is easier or more "user friendly".

SOFTWARE CONSIDERATIONS

Consider the following points about software selection. Do this in your head first then make notes in pencil.

CAUTION: There is no need to come up with all of the answers now. That would very likely lead to a premature, insufficient set of choices. This is best done as a group process. You may want to read the following reprints as well:

1. Selecting Microcomputer Systems for the School
2. Questions About Administrative Software
3. Data Bases and Special Education IEP Reports
4. Microcomputer Planning Guide

QUESTIONS TO ASK YOURSELF AND OTHERS

1. Based on the previous activities in this section, rank your needs and wants with regard to computer application for IEPs and administration. You may want to look over the duties of your teachers and staff as well. What tasks take the greatest amount of time and money that a computer could be doing?
2. How many students, teachers, and schools would ultimately be on the system when it is fully operational?
3. Would you want to use a microcomputer at the school site but also store data on a central computer for administrative purposes?
4. Do you have computers at the schools now? If so, what kind?
5. Were you planning to purchase more for administrative functions?
6. What funds or other resources do you have available now or will you have over the next year to support this project?
7. Do you have a person who has some background in computers and can talk supportively to people who will be assigned to oversee

the implementation of the project? What will the cost of that person's time be?

8. Will teachers and other staff be using the system? If so get a program that is easy to use so you don't have to spend a lot of time and money on training. Hopefully other staff time will be saved, once the system is in place, because the process is computerized.

About Software:

1. Do you want a particular format for your IEP or would a generic one on the program be O.K.? Do you want to customize the format?

2. How can you be assured that the goals and objectives the program generates will be sufficient for each child? Does the teacher pick the goals? Can you easily add to the goals, either for one child or for your whole bank of goals?

3. Would you like to do more than just an IEP? If so, can the program generate other reports etc., also?

4. How flexible is the program? Can you change fields or data items easily even after the system is all set up and running? Will it hold enough data fields for your needs? On how many fields will it search and sort? How many student records can the system hold and work with on a 1 or 2 disk drive system? Can you use a variety of different data types, such as word, code, numeric, menu, and extended text?

5. On what computers will the system run?

6. What is the cost of all the software you will need?

(A) for one school

(B) for several schools (discount for multiple copies?)

(C) for a centralized system

7. Are there hidden costs? Is there some built in mechanism that makes you dependent on the software company for expensive help or user fees?

8. Is there any mechanism for customer support, such as a telephone hotline?

9. How many students can this software and hardware realistically handle?
10. How easy is it to use? Is there on screen help or prompts for what you need to do? Does it use plain English? Are there tutorial disks and exercises or example cases in the documentation?
11. Look at the documentation. How easy is it to follow? Does it have step-by-step instructions as well as examples and diagrams? Does it use plain English or technical jargon? Does it have a good index?
12. Flexibility and ease of use interact sometimes. A simple but inflexible program will soon be frustrating for the things it won't do. A complex program can be implemented by a novice if the steps to implementation are well documented. A complex program without step-by-step instructions can be a horror because only a sophisticated computer person can manage it.
13. Are there levels of use so that the average teacher or staff person can use it quickly without much training while a manager who might have more expertise could do more with the system and have more skill with it?
14. Do you think it is worth the costs? It is good to think of this as an investment. Obviously it will take some work in the beginning so you must look for the payoff down the road. You only set up the template once. You only enter a child's informatin once. Thereafter, you change only the information you need to change. It becomes faster, more efficient and versatile the more you use it.
15. Do you know of others who are using the software under consideration? Talk to these people, and if possible, visit them and see how easy and quick it is and how the reports can be formatted.

EVALUATION AND
NEXT STEPS
PARTICIPANT
PACKET

FORMULA FOR SUCCESS

Goals

Haves

Concerns

Needs

TIME LINE

Who

Step

Case 611

13 p.3

next steps

EVALUATION AND NEXT STEPS

EVALUATION AND NEXT STEPS

PURPOSE(s): To explain the evaluation process of the 5 module training for replication at their sites.

To develop a timeline for implementing the training.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
	Script pg. L 10		
TRANSITION: We've complete the activities involved with the 5 training modules. Evaluation should always follow training.			
5 min	Review need for evaluation Describe form 104 and its uses	Listen	Participant Packet

TRANSITION: Our next step today is for you to decide on YOUR NEXT STEPS.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
20 min	Script pg. L 11 Summarize what's been done		
15 min	Pilot Site Personnel share their experiences 5 min each. They mingle later		
<u>TRANSITION:</u> You'll want to keep some of these thoughts in mind as you do your planning.			
15 min	Formulas for success: Goals Haves Concerns Needs	Complete formula for success	Participant Packet

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
5 min	Action Debrief Share common pitfalls		
<u>TRANSITION:</u> One of the first steps on your plan may be to provide an awareness training in order to elicit support for and interest in the long term training of the 5 modules			

EVALUATION AND
NEXT STEPS
A/V

EVALUATION AND
NEXT STEPS

SCRIPT

EVALUATION

GOAL: To explain the evaluation process of the 5 module training for replication at their sites.

Points to Cover/Script:

TRANSITION: We've completed the activities involved with the 5 training modules. Evaluation should always follow training.

1. *Now that the 5 training modules are completed, our efforts and achievements need to be evaluated.*

2. *At the end of the first evening, following the awareness session, you completed a Presentation Rating Form. At the end of each or all of the 5 modules you could also have your participants complete a Presentation Rating Form. Additionally since this is a knowledge level training, you should also include an evaluation of the knowledge they have received.*

3. *We use a content mastery form (form 104).*

4. *This form identifies the knowledge objectives of the trainings, as well as our means of evaluating the achievement of these objectives. We could develop a form with T/F statements, short answer questions, etc.*

5. *We would use the feedback information to assist us in our next trainings, or in follow-up. You may do the same.*

6. *A copy of these forms are included in the participants' packets of the training modules.*

TRANSITION: Our next step today is for you to decide on YOUR NEXT STEPS.

NEXT STEPS

GOAL: To develop a rough time line to implement the training modules.

GOAL: To identify potential pitfalls of implementing the training modules, and action ideas for handling them.

GOAL: To evaluate the Training of Trainers up to this point.

Points to Cover/Script:

1. *You've now received five training modules, and information for implementing these trainings at your home sites. The next steps include:*

- a identifying the next steps to be taken;*
- b laying these steps out on a time line;*
- c identifying potential problem areas; and*
- d identifying possible actions for dealing with the problems*

2 *Once we go through these four things you should have a rough outline to work from when you return to your site. This is a familiar process for most of you. Even so, we want you to concretely complete it so that when you leave you will have a tangible plan.*

3 *At this point allow pilot site personnel to share their experiences of implementing microcomputer technology at their site...it's never as easy as it seems. Each to have 5 min. Pilot site personnel and trainers can then mingle with the participants as they complete step 4.*

TRANSITION: *You'll want to keep some of these thoughts in mind as you do your planning.*

4 *Using the formula for success, have participants identify:*

- a their "goals" (which includes providing the trainings);*
- b their "haves" (what they have going for them to do this);*

- c their "concerns" (what pitfalls they may come upon); and
- d their "needs..." (what needs to be done to achieve the goals given what they have, and their concerns. These should be action statements.)

5 List the needs in order on the time line, noting a deadline and who will be responsible for completion of the need.

6 Debrief this process. Share common pitfalls and ideas for dealing with them.

TRANSITION: One of the first steps on your plan may be to provide an awareness training in order to elicit support for and interest in the long term training of the 5 modules.

DEVELOPING AN AWARENESS
TRAINING AND EVALUATION
PARTICIPANT PACKET

BASIC COMPONENTS OF AN AWARENESS TRAINING

- Your goals
- Identify participants' stage of concern and expectations
- Define your topic
- Identify why it is of value to participants
- Provide an example
- Provide a chance to practice
- Questions/Answers/Discussion
- Summarize
- Evaluate

- You may
- lecture
 - use slides
 - use transparencies
 - have handouts
 - use charts
 - be interrogative
 - have an experiential activity

SERN ID M/D/Y

TOPIC SERVICE

**SPECIAL EDUCATION RESOURCE NETWORK
PRESENTATION RATING**

REQUESTER/HOST

The intent of this form is to give you an opportunity to comment on various aspects of this inservice.
Feel free to make additional comments on the back of this page.

WORKSHOP TITLE _____

	Low	Below Average	Average	Above Average	High
<i>Inservice Evaluation:</i>					
1) To what extent were objectives clear?	1	2	3	4	5
2) To what extent were objectives met?	1	2	3	4	5
3) To what extent were materials provided of value in meeting objectives?	1	2	3	4	5
4) To what extent were the activities of value in meeting objectives?	1	2	3	4	5

<i>Presenter Evaluation:</i>					
1) To what extent did the presenter(s) appear to be knowledgeable about this subject?	1	2	3	4	5
2) To what extent was the presenter(s) able to communicate the subject content?	1	2	3	4	5
3) To what extent was the presenter(s) willing to adjust to meet the specific demands of the participants?	1	2	3	4	5

<i>Self Evaluation:</i>					
1) To what extent has this presentation increased your knowledge of the topic?	1	2	3	4	5
2) To what extent do you feel this knowledge will be useful?	1	2	3	4	5
3) To what extent do you feel capable of using this knowledge?	1	2	3	4	5

<i>General Evaluation:</i>	Low			Average				High	
1) Everything considered, I would rate the worth of this inservice to me as:	1	2	3	4	5	6	7	8	9
2) Everything considered, I would rate the presenter(s):	Low			Average				High	
	1	2	3	4	5	6	7	8	9

What were the major strengths of this inservice? _____

What were the major weaknesses? _____

As a follow-up to this inservice, I would like: _____

I would also like inservice in the following area(s) of: _____

SERN ID M/D/Y

TOPIC SERVICE

SPECIAL EDUCATION RESOURCE NETWORK
PRESENTATION RATING

REQUESTER/HOST

The intent of this form is to give you an opportunity to comment on various aspects of this inservice.
Feel free to make additional comments on the back of this page.

WORKSHOP TITLE _____

<i>Inservice Evaluation:</i>	Low	Below Average	Average	Above Average	High
1) To what extent were objectives clear?	1	2	3	4	5
2) To what extent were objectives met?	1	2	3	4	5
3) To what extent were materials provided of value in meeting objectives?	1	2	3	4	5
4) To what extent were the activities of value in meeting objectives?	1	2	3	4	5

<i>Presenter Evaluation:</i>	1	2	3	4	5
1) To what extent did the presenter(s) appear to be knowledgeable about this subject?	1	2	3	4	5
2) To what extent was the presenter(s) able to communicate the subject content?	1	2	3	4	5
3) To what extent was the presenter(s) willing to adjust to meet the specific demands of the participants?	1	2	3	4	5

<i>Self Evaluation:</i>	1	2	3	4	5
1) To what extent has this presentation increased your knowledge of the topic?	1	2	3	4	5
2) To what extent do you feel this knowledge will be useful?	1	2	3	4	5
3) To what extent do you feel capable of using this knowledge?	1	2	3	4	5

<i>General Evaluation:</i>	Low			Average					High
1) Everything considered, I would rate the worth of this inservice to me as:	1	2	3	4	5	6	7	8	9
2) Everything considered, I would rate the presenter(s):	Low			Average					High
	1	2	3	4	5	6	7	8	9

What were the major strengths of this inservice? _____

What were the major weaknesses? _____

As a follow-up to this inservice, I would like: _____

I would also like inservice in the following area(s) of: _____

SERN ID 1 1 4

Month Day Year

TOPIC 0 7 0 1

SERVICE 1 2 2

REQUESTER/HOST 8 0 0 0 1 1 9

WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
ADMINISTRATION-----
OBJECTIVE(S): To provide computer literate personnel with:

1. a 5 module training on the uses of microcomputers for administrative purposes in special education, that they can replicate;
2. an opportunity to draft an awareness session for their staff;
3. an opportunity to layout a plan for providing this long term training to their staffs.

INDICATORS OF SKILL MASTERY:

RATING

1. Participants attended all components of the training of trainers.
2. Participant was actively involved in all components of the training of trainers.
3. Participant completed the tutorials and activities in each of the following sessions:

Awareness
Word Processing
Administrative Planning
Data Bases
Preprogrammed Administrative
Applications
Spreadsheets

4. Participant completed a time line, alone or with colleagues for implementing the training module.
5. Participant drafted an awareness module alone or with colleagues.

COMMENTS (Options):

MS 285

SCORE

%

SERN ID 1 1 4

Month	Day	Year

TOPIC 0 7 0 1

SERVICE 1 2 2

REQUESTER/HOST 8 0 0 0 1 1 9

WORKSHOP TITLE: MICROCOMPUTERS IN SPECIAL EDUCATION
ADMINISTRATION-----
OBJECTIVE(S): To provide computer literate personnel with:

1. a 5 module training on the uses of microcomputers for administrative purposes in special education, that they can replicate;
2. an opportunity to draft an awareness session for their staff;
3. an opportunity to layout a plan for providing this long term training to their staffs.

INDICATORS OF SKILL MASTERY:

RATING

-
1. Participants attended all components of the training of trainers.
 2. Participant was actively involved in all components of the training of trainers.
 3. Participant completed the tutorials and activities in each of the following sessions:

Awareness
Word Processing
Administrative Planning
Data Bases
Preprogrammed Administrative
Applications
Spreadsheets
 4. Participant completed a time line, alone or with colleagues for implementing the training module.
 5. Participant drafted an awareness module alone or with colleagues.

COMMENTS (Options):

DEVELOPING AN AWARENESS
TRAINING AND EVALUATION

DEVELOPING AN AWARENESS SESSION AND EVALUATION

PURPOSE(s): To draft awareness trainings and share them in a large group format.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
5 min	Script pg. M-12 Review need to do needs assessment. Remind them the first evening was an awareness session. Participants are to draft an awareness session. *identify your audience *may use our outline *may make own *1hr 15 min to work We will share them. Questions?	Listen Ask and discuss	Participant Packet Chart

TRANSITION: Begin your module development. Work with your colleagues as much as possible.

TIME	LEADER ACTIVITIES	PARTICIPANT ACTIVITIES	MATERIAL OR EQUIPMENT NEEDED
1hr 15 min			-Charts -Pens -Paper -Participant Packet
60 min	Pull group together to share, 15-20 min each. Script pg. M-13	Share sessions	
<u>TRANSITION:</u>	We've worked hard since we began this training, and have accomplished a great deal. Let's review our original goals to see where we stand with them.		
	Review goals Trainers complete evaluation forms; collect <u>all</u> forms	Listen and respond Write	Participant Packet 105's
		289	

TIME

LEADER ACTIVITIES

PARTICIPANT
ACTIVITIES

MATERIAL OR
EQUIPMENT NEEDED

Participants complete
103's

Identify follow-up
options

Closure and thanks

Clean-up

Listen/discuss

Comments/depart

103's

290

DEVELOPING AN AWARENESS
TRAINING AND
EVALUATION
A/V

DEVELOPING AN AWARENESS
TRAINING AND EVALUATION

SCRIPT

DEVELOPING AN AWARENESS LEVEL TRAINING

GOAL: Participants will draft a short awareness level training on the uses of microcomputers for special education administrative purposes.

GOAL: One or more of the participants will share the awareness training they develop with the large group.

Points to Cover/Script:

1. *We assume as quality staff developers that a needs assessment preceeds the trainings, and that the trainings fill needs identified by the needs assessment.*

2. *You will recall our first evening session. This was essentially an overview, or awareness level training. The purpose is to elicit support for and interest in the trainings to follow. It is to provide recognition of new information and changing attitudes.*

3. *Your job now is to draft an awareness session for your staff, tailored to their needs and interests.*

4. *We have an outline of some basic concepts you may wish to include, as we did. However, you have the next 1 hour and 15 minutes to work on this. We will be available to assist you in whatever way we can.*

5. *Questions? Entertain questions, etc. Provide necessary materials, work space, parameters.*

6. *At 3:30 p.m. we would like to share some of the awareness trainings that you have drafted. To do this, you may wish to lay out your agenda on a sheet of chart paper for the group to see.*

TRANSITION: Begin your module development. Work with your colleagues as much as possible.

7. *Stop the group. Pull them back together. Elicit 2-3 volunteers to share. Discuss and be alert to common concerns and fears.*

TRANSITION: We've worked hard since Thursday evening and accomplished a great deal. Let's review our original goals to see where we stand with them.

FINAL EVALUATION AND FOLLOW-UP

GOAL: To collect evaluation information using SERN forms 103 and 105.

GOAL: To provide three possible sources of follow-up to the training just completed.

Points to Cover/Script:

1. *Re-read original goals, one by one and ask participants if they have been achieved. They should say, "yes." You may even review expectations of the group that were charted.*

2. *Again good practice and our grant requires that we evaluate our trainings. To do this we have two forms to complete, one by you, the other by us:*

- a. *Presentation Rating Form again which will provide numeric data, averaged and summarized, as well as open-ended feedback to the questions at the bottom of the form regarding the last two days of training.*
- b. *Skill Practice Rating Form which has 5 criteria upon which we evaluate the success of this training:*
 - I. *Attend all of the training of trainers*
 - II. *Be actually involved in all components of the training of trainers*
 - III. *Complete the tutorials and activities in the training modules*
 - IV. *Complete, alone or with colleagues, a time line for implementing these training modules*
 - V. *Draft, alone or with colleagues, an awareness level module to present to home staff*
- c. *Complete the top of the Presentation Rating Form with the date 11-09-85, and with the service: 123. Note the service when we provide the training directly to administrative types will be 122, to go with the form 104 evaluation - "knowledge," not "skill/practice".*

Please complete the entire evaluation form, and be thoughtful in your responses. We will use this information to refine our next efforts.

- d Hand in one of your forms 105 to us with your name on the bottom. The other is yours to keep as a sample.
- 3 There are four possible routes for you to obtain follow-up to this training:
- a You may contact our SERN-RSC office for clarification and information regarding the modules. The amount of assistance we can give you is limited, but we are available to help.
 - b You may contract with private consultants to provide additional support. Some are listed in the CCUG.
 - c You may meet together in whole or part, to support one another's efforts to implement the trainings, and to have your staffs implement the skills and tools provided in the trainings on their jobs.
 - d You may have staff attend future trainings of the MicroAdmin Project in Southern California, the Bay Area or in Sacramento.

4. Questions/Discussion

5 I want to thank all of you for taking time from your busy schedules to attend a long and very full 2 1/2 days. I hope it has been of value to you.

6 Finally, I'd like to thank our presenters and pilot site personnel who were instrumental in all phases of the development of this training and the materials we have used.

APPENDIX



RATING SUMMARIES

SERN ID 114

Month Day Year

TOPIC 0701

SERVICE 122

REQUEST/HOST 80 00119

PRF - 103

	Inservice				Presenter			Self			Gen.	
	1	2	3	4	1	2	3	1	2	3	1	2
1												
2												
3												
4												
5												
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9												
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25												
26												
27												
28												
29												
30												

Total # Participants _____

MASTERY RATING SUMMARY

- ☐ Content Mastery 104
- ☐ Skill Practice 105
- ☐ Skill Implementation 106

passed at 80% _____

tested/observed _____

% PASS _____

GOAL ACHIEVED?

☐ yes ☐ no

Total

of ratings

Average

Max Possible

G.A.T.

PRF - 103

GOAL ACHIEVED?

☐ yes ☐ no

N2

298



RATING SUMMARIES

SERN ID 114

Month Day Year

TOPIC 0701

SERVICE 122

REQUEST/HOST 80 00119

PRF - 103

	inservice				Presenter			Self			Gen.	
	1	2	3	4	1	2	3	1	2	3	1	2
1												
2												
3												
4												
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25												
26												
27												
28												
29												
30												

Total # Participants _____

MASTERY RATING SUMMARY

- ☐ Content Mastery 104
- ☐ Skill Practice 105
- ☐ Skill Implementation 106

passed at 80% _____
tested/observed _____
% PASS _____

GOAL ACHIEVED?

☐ yes ☐ no

- Total

of ratings

Average

Max Possible

G.A.T.

PRF - 103

GOAL ACHIEVED?

☐ yes ☐ no

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MAGICALC

QUICK REFERENCE

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Quick Reference

MOVING THE MARKER IF DIRECTION INDICATOR IS HORIZONTAL

Left Arrow	Move the Marker one cell to the left. (Direction indicator independent)
Ctrl-A	Move the Marker one cell to the right. (Direction indicator independent)
Right Arrow	Move the Marker one cell to the right. (Direction indicator independent)
Ctrl-B	Move the Marker one cell up. (Direction indicator independent)
Up Arrow	Move the Marker one cell up. (Direction indicator independent)
Ctrl-D	Move the Marker one cell down. (Direction indicator independent)
Down Arrow	Move the Marker one cell down. (Direction indicator independent)
Ctrl-Z	Move the Marker one cell down. (Direction indicator independent)

OTHER MARKER MOVES

Ctrl-W	Move the Marker 10 cells up.
Ctrl-X	Move the Marker 10 cells down.
Ctrl-E	Move the Marker to top left of worksheet (within lites).
Ctrl-C	Move the Marker to bottom right of worksheet.
TAB	Tab to next unprotected field.
Ctrl-Y	Tab to previous unprotected field.
:	Move marker to alternate window (if defined with /W command).
> coord	Go To command. Sends marker directly to a coordinate.

CALCULATION

+	Addition
-	Subtraction
*	Multiplication
/	Division
A	Exponentiation
#	Replaces coordinate immediately to the left of 1 cursor on the entry line with its value.
!	If pressed when a formula is on the entry line, replaces the formula with its calculated value.
!	If pressed when the entry line is empty, causes the entire worksheet to be recalculated.

EDITING

ESC	ESCAPE key deletes the character on the entry line immediately preceding the edit cursor. Also called destructive backspace.
Ctrl-E	Invokes edit mode. For more information on editing data on the entry line, see the /E (edit) command.
Ctrl-T	Truncates from cursor position to end of line.
Any Other Key	Insert character on keypad.
FUNCTIONS	
@ABS(value)	Return absolute value.
@AND(list)	Return TRUE if all values are TRUE, otherwise FALSE.
@AVERAGE(list)	Return the average of a list of values, a range, or a list of ranges.
@CHOOSE(index, list)	Return the value in the list corresponding to the value of index.
@COL	Return the numerical value of the current column.
@COUNT(range)	Return the number of values in a range. Labels and blank cells are not counted.
@ERROR	Return the value ERROR.
@EXP(value)	Return the value of e raised to the value of value.
@FALSE	Return the value FALSE.
@IF(condition, value1, value2)	Return value1 if condition is true, otherwise return value2.
@INT(value)	Return the integer portion of value.
@ISERROR(value)	Return TRUE if value is ERROR, otherwise FALSE.
@ISNA(value)	Return TRUE if value is NA, otherwise FALSE.
@LN(value)	Return the natural (base e) logarithm of value.
@LOG10(value)	Return the common (base 10) logarithm of value.
@LOOKUP(value, range)	Compare value to the table specified by range and return the lookup value corresponding to the last table value less than or equal to value.
@MAX(list)	Return the maximum value in a list.
@MIN(list)	Return the minimum value in a list.
@NA	Return the value NA.
@NOT(logical)	Return TRUE if logical is FALSE, otherwise return FALSE.

- % NPV** Return net present value of a range of cash flows discounted at discount. Discount must be a decimal fraction.
- @ OR(list)** Return TRUE if any values in the list are TRUE, otherwise return FALSE.
- % PI** Return the value of PI.
- @ ROUND (value, ndec)** Return value rounded to ndec decimal places.
- @ ROW** Return the row number.
- @ SORT(value)** Return the square root of value.
- @ SUM(list)** Return the sum of a list of values. Blank cells and labels are ignored.
- % TRUE** Return the value TRUE.

CALCULATE SUBSYSTEM COMMAND SUMMARY

- IA** Set Attribute
 - D** Default
 - A** All. Accept all data.
 - L** Labels. Accept only labels.
 - V** Values. Accept only values.
 - P** Protect. Do not allow data entry in cell.
 - H** Hide. Hide contents of cell.
- IB** Blank Contents of Cell
- IC** Clear Worksheet. Must be confirmed with a Y.
- ID** Delete Row or Column
 - R** Delete row on which the marker rests.
 - C** Delete column on which the marker rests.
- IE** Edit a Cell
 - Arrow keys** Non-destructive cursor movement.
 - ESC** Destructive backspace.
 - Other keys** Insert characters.
- IF** Format a Cell
 - D** Default
 - G** General. As much precision as possible within column boundaries.
 - I** Integer. Display values as integers, but retain decimal significance to 11 digits.
 - L** Left Justify. Display values and labels flush left in a column.
 - R** Right Justify. Display values and labels flush right in a column.

- \$** Dollars. Display values to two decimal places (dollars and cents).
- *** Graphic. Display rough line graph format for values.
- ID** Set Global Parameters
- C** Set Global Column Width. Set column width for the entire worksheet.
- O** Calculation Order. Set the order in which the worksheet is calculated.
 - R** Calculate the worksheet row by row.
 - C** Calculate the worksheet column by column.
- R** Recalculation. Should the entire worksheet be recalculated every time a new value is entered.
 - A** Automatic. Recalculate the entire worksheet every time a new value is entered.
 - M** Manual. Recalculate the entire worksheet only when the exclamation point (!) key is pressed.
- F** Set Global Format. Set cell format for the entire worksheet. For options, see the **IF** (Format) command.
- A** Set Global Attributes. Set cell attributes for the entire worksheet. For options, see the **IA** (Attribute) command.
- II** Insert Row or Column
 - R** Insert row above the row on which the marker rests.
 - C** Insert column to the left of the column on which the marker rests.
- IL** Set Individual Column Width. Set the width of the column on which the marker currently rests.

Column width may be any value 0 through 80. A column width of 0 will produce a "hidden" column which will be skipped when moving the marker. "Hidden" columns are only accessible using the Go To command. When the marker is resting on a "hidden" column, it vanishes from the worksheet and appears on the contents line.
- IM** Move a Row or Column to another position on the worksheet. A cell in the row or column to be moved must be specified as the "from" location, and a cell in the row or column below or to the right of the desired location must be specified as the "to" location.
 - A column move will take place if both cells have the same row number.
 - A row move will take place if both cells have the same column number.
- IP** Invoke the Print Subsystem

- IR** Reproduce. Reproduces a cell, a range of cells, or a block of cells to other locations on the worksheet.
 - [** Invoke Reproduce options.
 - A** Copy attributes only.
 - F** Copy formats only.
 - C** Copy contents of cell only (no formats or attributes).
 - V** Copy values and labels (no formulas).
 - N** Copy all formulas with no change in the cell references, and no prompting.
 - R** Copy all formulas with relative change in the cell references, and no prompting.
 -]** Exit options section.
- IS** (Storage command) Invoke the File Subsystem.
- IT** Set Titles for Worksheet.
 - H** Define horizontal titles as the row on which the marker is currently resting, and all rows above it.
 - V** Define vertical titles as the column on which the marker is currently resting, and all columns to the left of it.
 - B** Both horizontal and vertical titles are fixed as the row on which the marker is currently resting and above the column on which the marker is currently resting and left.
 - N** None. Remove all title definitions.
- IW** Set Window.
 - H** Horizontal window split occurs at the current marker position, creating two windows.
 - V** Vertical window split occurs at the current marker position, creating two windows.
 - 1** Any window splits in effect are removed, and the worksheet is displayed as one large window.
 - S** Synchronize Windows. When windowing is in effect, synchronized windows force the two to scroll together.
 - U** Un synchronize Windows. When windowing is in effect, the unsynchronize command causes the two windows to scroll independently of one another.
- IR—** Repeating Label. Causes a character or string of characters to be repeated as many times as necessary to fill a cell. This function is independent of column width.